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ABSTRACT

This report reviews economic factors affecting the universities of Ontario, Canada. In 34 tables and 25 figures it provides comparative data with other Canadian and American institutions over the past 15 years. An executive summary reveals that operating grants from the Ontario government have been declining, and that many universities have been forced to lay off staff and reduce spending in response to budgetary difficulties. In addition, public financial support, transfer payments, and provincial support to Ontario universities have not kept up with economic growth or the growth of government. Canadian universities receive about 25 percent less government support for each student than they did in 1977-78 (compared to the 10 percent decrease for U.S. universities in the same time period). Tuition fees have increased less over the course of the past decade in Ontario than in any other part of the country. Ontario universities are also spending 17 percent less on salaries for each student enrolled than in 1977-78 and less on buildings, land, and site services than have universities in seven of the nine other provinces. The report concludes that the continuing crisis of underfunding threatens both quality and accessibility unless increased financial support and greater funding is forthcoming. An appendix provides an update of the Ontario University Non-Salary Price Index. (GLR)

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The Financial Position of Universities in Ontario : 1994

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The Financial Position of Universities in Ontario : 1994

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January 1994

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Executive Summary

- **T**he *Financial Position of Universities in Ontario: 1994* is published in an era of declining operating grants from the Ontario government. Many universities have had to lay off staff in response to budgetary difficulties. The imposition of the Social Contract has brought reductions in salaries and wages. The universities have responded by proposing an innovative reform package of tuition fee and student assistance increases.

- **T**his has occurred at a time when university graduates have the lowest rate of unemployment of any group in the work force. At the height of the most recent recession, the unemployment rate for university graduates was less than a third of that of people who had less than a high school education. The number of people with university degrees who were employed continued to increase. University graduates continued to receive higher incomes than individuals with less academic training.

- **A**t the same time, once inflation is taken into account, universities are able to spend 12% <u>less</u> money for each student enrolled than they were in 1977-78. Schools and hospitals spend approximately 50% more and the Government of Ontario is spending 16% more on delivering its programs to each citizen of the province than was spent in 1977-78. In constant dollar terms, OHIP payments to medical doctors are more than double what they were in 1977-78.

- **T**he *Financial Position* also indicates that, during the past couple of decades, transfer payments to universities increased less than total government spending in virtually every fiscal year and there has been a continual decline in the proportion of transfer payments going to universities. Rarely have transfer payments to universities kept up with the GDP and, in the current fiscal year, they would have had to be increased by 26% just to bring them back to the level of 1977-78.

- **I**f public financial support of universities in Ontario has not kept up with the growth of the economy or the growth of government, it is also clear that support for Ontario universities has not kept pace with

public financial support for universities in other provinces. At present, Ontario spends less of its provincial income on operating grants to universities than any province except British Columbia.

- **C**ompared to universities in the United States, Canadian universities receive about 25% less government support for each student than they did in 1977-78 while American universities receive about 10% less than they did at the beginning of this period.

- **T**he impact of underfunding has been significant. It has resulted in large, accumulated operating deficits at many Ontario universities. On the revenue side, Ontario universities have been less able to rely on grants from the provincial government than have universities in other provinces. During the past decade, income from the private sector in the form of gifts, donations and grants has more than doubled.

- **T**uition fees have increased less over the course of the past decade in Ontario than in any other part of the country. In fact, tuition fees in Ontario have increased by less than half as much as in some other provinces. Compared to tuition fees charged by American universities, those charged in Ontario are truly a "bargain". The "affordability" of university tuition fees appears to be greater than it was in 1977-78 and greater than it has been during much of the period since then.

- **O**n the expenditure side, the costs of employee benefits have been driven up by increased costs of the Unemployment Insurance Commission and the creation, by the Ontario government, of the Employer Health Tax. Ontario universities are spending 17% less on salaries for each student enrolled than they were in 1977-78 and the value of library acquisitions for each student enrolled is 43% less than it was in 1977-78. Ontario universities have been able to spend less on buildings and on land and site services than have universities in seven of the nine other provinces.

- **T**he *Financial Position* concludes that the continuing crisis of underfunding threatens both quality and accessibility. Financial support from the provincial government must be increased substantially and additional revenue found from other sources if universities are to provide for greater accessibility and high quality education and research.

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The graphical and tabular data displayed in this report commence with the 1977-78 university fiscal year. This base year has been chosen because it was the last year in which the financial advice of the Ontario Council on University Affairs, the government's advisory body on higher education, was accepted. The data presented end with the most current year for which information is available.

The Financial Position of Universities in Ontario : 1994

> We cannot build a solid and sustained economic recovery if we do not invest in jobs and take firm action on the public debt. Excluding sovereign countries, Ontario has become the largest borrower in the world. On average we borrow more than $1 billion a month. We spend more on interest costs than we spend on our schools. About two-thirds of our new borrowing comes from outside Canada, which means that most of the interest we pay on this borrowing goes to foreign bankers, not to Ontarians.
>
> The Honourable Floyd Laughren,
> Ontario Minister of Finance,
> 1991 Ontario Budget

The Treasurer's concerns about the public debt, provincial borrowing, interest costs, and repayment of the amounts borrowed have come to overshadow all other issues of public finance within the Province of Ontario. These concerns took over the agenda of public policy discussions in Ontario during most of the past year. They led the Treasurer to generate additional government revenue by increasing taxes, to reduce government spending by imposing an Expenditure Control Plan, and to cut transfer payments to the broader public sector by imposing a Social Contract on public sector workers. These concerns have had a major impact on universities.

Government grants have been reduced. Many universities have had to lay off staff in response to budgetary difficulties. The imposition of the Social Contract has brought reductions in salaries and wages. The universities have responded by proposing an innovative reform package of tuition fee and student assistance increases.

The government's problems have arisen from the deep economic recession which has plagued Ontario for the past three years. In the fiscal year 1991-92, for the first time in living memory, provincial government revenues actually declined from the previous year. Not until the current fiscal year, 1993-94, will revenues be expected to equal or exceed the government's revenue total of 1990-91. After adjusting for inflation, provincial government revenues will be significantly lower than they were three years ago.

The extent of the recession is demonstrated in Figure 1 and Table 1. They show an unemployment rate which is higher than at any time in the past decade. However, they also dramatically illustrate that unemployment rates decline as education increases.

Most significantly, university graduates have had the lowest rate of unemployment of any group in the work force. At the height of the recession, the unemployment rate for university graduates was less than a third of that of people who had less than a high school education.

Similar findings result from an examination of labour force participation rates. Figure 2 demonstrates that university graduates are most likely to be members of the labour force.

In the middle of the worst recession in many years, the number of people with university degrees who were employed continued to increase.

Figure 3 shows the percentage change in the number of people in Canada who were employed. While the number of people who did not go any further than high school and who were employed decreased substantially during both 1991 and 1992, the number of university graduates who held jobs increased in both years. Table 2 suggests that, even in recession wracked Ontario, the number of university graduates who were employed has increased each year while the number of employed men and women without post-secondary training has been sharply reduced since 1990.

University graduates continue to receive higher incomes than those people with less formal academic training.

Figure 4 and Table 3 suggest that, at the time of the 1991 census, the average university graduate in Ontario had approximately double the income of someone with only a high school education or some post-secondary training. The university graduate had an income more than

two and one-half times as great as someone without a high school education.

- ***University graduates are less likely to be unemployed.***
- ***University graduates are more likely to be members of the labour force.***
- ***University graduates are more likely to be employed.***
- ***University graduates are more likely to be receiving a higher income than those people without a university degree.***
- ***University graduates are directly contributing toward higher government tax revenues.***

An investment in the universities of Ontario is a good one for the Government of Ontario to make.

The Treasurer is correct in giving a high priority to investing in jobs as a means of stimulating an economic recovery and a large proportion of those new jobs will require a university degree.

Universities also make a contribution to the economic life of this province as they carry out their normal operations. A recent study showed that for every dollar of public funding from government, universities generated four dollars of economic returns for the provincial economy. It also showed that spending by those universities generated more tax revenues for the various levels of government than those governments spent on universities.[1]

UNIVERSITIES AS A PUBLIC PRIORITY

Universities have long made the argument that, within the total expenditures made by the Government of Ontario, the proportion allocated to universities is inadequate.

In other words, even if one accepts the Treasurer's stated priority of controlling the public debt, the universities' share of the government's total expenditures is inadequate.

Certainly, in comparison with the demand for admittance into Ontario universities, the government's willingness to meet that demand has been lacking. Figure 5 and Table 4 report how many students the Ontario government has been willing to support at 1977-78 levels of operating income. As of 1992-93, the

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1 A.A. Kubursi, "The Economic Impact of University Expenditures in 1992", McMaster University and Econometric Research Limited, April 1993.

government was funding the equivalent of 267,031 full-time students at 1977-78 levels of operating grants.

That left the equivalent of 46,467 full-time students who were not being funded through provincial operating grants.

In effect, Ontario universities have been enrolling these additional students without benefit of government support and have had to rely on tuition fees alone to provide them with a quality education.

Figure 6 and Table 5 indicate that, over the past decade or more, post-secondary education has ranked far below average in its share of financial resources from Ontario society.

Once inflation is taken into account, it becomes obvious that universities are able to spend 12% less money for each student enrolled than they were in 1977-78 while, during this same time period, schools and hospitals were able to spend approximately 50% more and the Government of Ontario is spending 16% more on delivering programs to each citizen of the province than it spent in 1977-78.

Figure 7 and Table 6 confirm these conclusions.

Only in 1992-93 and 1993-94 have OHIP payments to medical doctors declined and, even with those reductions, in constant dollar terms OHIP payments are still more than double what they were in 1977-78.

Figure 8 and Table 7 examine transfer payments by the Ministry of Community and Social Services and suggest that during every year, except 1993-94, funding has increased more quickly than inflation and is three or four times as great as it was in 1977-78. All of these increases took place at a time when operating grants to universities were barely keeping ahead of inflation and were falling far behind the growth in university enrolments.

Figure 9 and Table 8 summarize the increases or decreases in operating grants to universities for each year since 1977-78 in comparison with increases or decreases in total spending by the Government of Ontario.

They indicate that, during the past couple of decades, transfer payments to universities increased less than total government spending in virtually every fiscal year.

Figure 10 and Table 9 report the universities' share of provincial government spending as a share of

total program spending. That is, they exclude payments on the public debt and compare provincial spending on universities with spending on all provincial programs.

These figures demonstrate a continual decline in the proportion of transfer payments going to universities. Only major cutbacks in other sectors have prevented the universities' share of provincial government spending from declining still further during the past two years.

Figure 11 and Table 10 compare the growth of government spending and grants to the universities with the growth of the economy as a whole, as measured by growth of the Gross Domestic Product. They suggest that between 1990 and the current year, spending by the Ontario government grew much more quickly than the economy as a whole. This economic trend has only been corrected by the government's recent drastic measures. Universities have not followed this trend.

Rarely have transfer payments to universities kept up with the GDP and in the current fiscal year, they would have had to be increased by 26% just to bring them back up to the level of 1977-78.

COMPARISONS BETWEEN ONTARIO AND OTHER JURISDICTIONS

If public financial support of universities in Ontario has not kept up with the growth of the economy or the growth of government, it is also clear that public support in this province has not kept pace with public financial support for universities in other provinces.

As Figure 12 and Table 11 illustrate,

Provincial government operating grants to universities for each student enrolled declined significantly in Ontario throughout the 1970s, 1980s and 1990s and support for universities in Ontario continues to be far below average.

In fact, in 1993-94 it is estimated that the universities in the nine other provinces will receive almost one thousand dollars more for each full-time student enrolled than Ontario universities. Of the 10 provinces in the country, Ontario has ranked eighth, ninth or tenth in every year since the 1970s. We estimate that Ontario will continue this level of support on into 1993-94. This is not the case for Ontario's support of other

parts of the broader public sector. As Table 12 demonstrates, hospitals, elementary and secondary schools do much better in Ontario, when compared to hospitals and schools in other provinces.

This low level of support for universities is not a product of a poor provincial economy. As Table 13 demonstrates, even when the relative wealth of the various provinces is taken into account,

Ontario spends less of its provincial income on operating grants to universities than any province except British Columbia.

Figure 13 and Table 14 demonstrate that, by comparison with the growth of the Gross Domestic Product, operating grants to universities have not kept pace. This lack of growth of provincial support has not been unique to Ontario. Universities in most other provinces have seen their operating grants fail to keep up with economic growth, although not to the same extent as in Ontario.

The failure of Ontario to provide its universities with operating grants equivalent to those provided to universities in other provinces shrinks in significance when compared with the level of support provided in the United States. Figure 14 demonstrates that the major decline in government support which was experienced by universities in Canada during the 1980s was not matched by an equivalent decline in the United States. In that country, a decline of public, financial support for universities during the recession of the early 1980s was quickly reversed during the remainder of the decade.

Canadian universities receive about 25% less government support for each student than they did in 1977-78 while American universities receive about 10% less than they did at the beginning of this period.

Figure 15 compares Ontario with 11 of the larger American states during the past decade, the period when state support for American universities recovered and provincial support for Canadian universities continued to decline. Eight of these large states border on the Great Lakes and are neighbours of Ontario. These 11 states constitute a majority of people in the United States. Figure 15 suggests that,

Ontario universities received about 3% more in operating grants in 1992-93 than at the beginning of the decade, a gain which will have been reversed in the past year, while the

average American university received over 5% more than in 1982-83.

The increase in state support for American universities varied tremendously from state to state. New York had a decline in its support for universities during this period, but California increased its support by 14%, Illinois by 20%, Michigan by 20%, Indiana by 16%, Wisconsin by 24%, and Ohio by 13%.

The most recent data from the United States suggest that Ontario continues to fall behind most American states.

Table 15 reports every state in the union in order of its percentage increase in state government appropriations for post-secondary education for the past two years. A two year comparison is necessary because of American legislative practices. Ontario universities received a 3% reduction in operating grants during these two years. Note that there are only four states which fared worse than Ontario and that there are an equivalent number of states which have had 13% or 18% increases in their grant levels.

A more detailed comparison between the revenues of Ontario universities and those of American universities is provided by Figure 16 and Table 16. The comparisons are between research, doctoral level universities in Ontario and in the same 11 large states. These institutions represent the largest, most prominent private and public universities in those 11 states. They indicate that in 1990-91 the average public university in the United States received about 19% more in state grants for each full-time student than Ontario universities received in provincial grants. Private universities had tuition fees which were several times as great as those charged in Ontario universities. Public universities in the United States had tuition fees which averaged 77% above those in Ontario. Both public and private universities received several times as much revenue from federal government contracts as did Ontario universities.

Figure 17 and Table 17 demonstrate the impact of the tremendous differences in the level of financial support between Ontario and the United States. American universities are able to spend more resources on virtually every activity in which they are involved. For example, in the area of scholarships and fellowships, the American public universities spent almost five times as much as Ontario universities. Private universities spent 14 times as much.

An even more intensive comparison is offered by Tables 18 and 19. They compare two universities in Ontario, the University of Toronto and Queen's University, with similar institutions in the United States.

In the case of the University of Toronto, comparatively large, public universities in the United States had about 54% more income.

The greatest difference was in the revenue from federal government contracts, state government grants, and tuition fees. Private gifts, grants and contracts also were higher at the American universities.

In the case of Queen's University, the public universities chosen for comparison in the United States had about 20% more income while the selected group of private universities had more than double the income per student.

Among the public universities, tuition fees yielded the greatest advantage for the American universities. State grants and federal contracts produced smaller but still significant differences. The private universities relied most heavily on tuition fees, federal contracts, private gifts and endowment income.

These tables and graphs all suggest that Ontario universities are funded at a much lower level than their counterparts in other provinces and in the United States. Among the Canadian provinces, most of the difference is in the level of operating grants from the provincial governments. Ontario universities are among the most poorly funded in the country. In the case of American universities, Ontario institutions receive less in the way of provincial grants than public universities in the United States receive from state governments, less in the way of tuition fees and less from contracts with the Government of Canada than American universities receive from the Government of the United States.

RESPONSES TO UNIVERSITY UNDERFUNDING: INCOME

On the revenue side, Ontario universities have been less able to rely on grants from the provincial government than have universities in other provinces.

All of this has had an impact on Ontario universities and the way they operate.

As Table 20 demonstrates, Ontario universities have come to

rely more heavily on fees and other income and less heavily on provincial government grants and on federal government grants and contracts than have universities in most provinces. Ontario universities have come to rely on broader financial support from the community at large. As Table 21 demonstrates,

during the past decade income from the private sector in the form of gifts, donations and grants has more than doubled.

Even after adjusting for inflation, the constant dollar value of the income received from this source has increased by 55%.

Universities have also had to rely on increased tuition fee income from their students. In Figure 18, tuition fees are shown to have taken up a small part of the shortfall in revenue caused by declining operating grants from the province.

Unfortunately, the increase in tuition fee revenue, $559 from each student since 1977-78, has been inadequate to compensate for a shortfall in government grants of $1,481 for each student.

This prolonged government underfunding has led the universities of Ontario to propose a series of reforms to tuition fee policy. These reforms recognize the long term lack of adequate government funding and the likelihood that this situation will not change for at least the next few years. The universities also recognize that students receive a significant economic benefit from attending university and that tuition fees are quite low compared to other jurisdictions and compared to rates charged by Ontario universities in past years.

Table 22 compares undergraduate arts tuition fee rates charged by various universities across Canada in 1993-94 with those charged a decade earlier, in 1983-84. It indicates that tuition fees charged in Ontario universities are near the average for the country as a whole. They are significantly lower than in the Maritime and Western provinces, but higher than in Newfoundland and Quebec.

Over the course of the decade, tuition fees have increased less, in Ontario, than in any other part of the country. In fact, tuition fees in Ontario have increased by less than half as much as those in some other provinces.

Compared to tuition fees charged by American universities, those charged in Ontario are truly a "bargain".

Table 23 provides a few examples of tuition rates at public and private universities in the United States. The tuition fees levied at public universities in the United States are considerably higher than those charged at Ontario universities - more than twice as much in some cases. If a student does not come from the state in which the university is located, he or she also pays an additional out-of-state fee of several thousand dollars. At private universities in the United States, tuition fees can be 10 times as great as those charged at Ontario universities.

Figure 19 and Table 24 average the tuition fee rates charged at five universities[2] in arts, medicine and engineering for over 40 years and state those rates in terms of constant dollars. Once inflation is taken into account, current tuition fee rates do not appear to be out of the ordinary. In fact, it is the 1970s which appear to be out of the ordinary. This was an era of low tuition fees which is not likely to be duplicated in the near future.

Figure 20 and Table 25 compare tuition fees at Ontario universities with average per capita income and the average family income of the population as a whole.

The "affordability" of university tuition fees appears to be greater than it was in 1977-78 and greater than it has been during much of the period since then.

Tuition fees are no more expensive, to the average individual or to the average family, than they were a decade and a half ago.

RESPONSES TO UNIVERSITY UNDERFUNDING: EXPENDITURES

The Ontario government's continuing unwillingness to provide adequate funding for Ontario's universities has resulted in large, accumulated operating deficits at many Ontario universities.

Table 26 suggests that, at those universities and affiliated colleges with operating deficits, the total of these deficits has reached almost $70 million. The Ontario government's failure to provide adequate funding has also resulted in major alterations in the spending patterns of those institutions. For example, the level of research effort at Ontario universities has expanded considerably. However,

2 McMaster University, University of Ottawa, Queen's University, University of Toronto, and the University of Western Ontario.

this expansion has not been coupled with increased financial support that would provide the technical resources which this increased research activity requires. Figure 21 and Table 27 show that, while the research enterprise has almost doubled in significance since 1977-78, the operating base of the institution has barely kept ahead of inflation. This means that the overhead costs of that research will bear heavily on the whole institution.

The research enterprise at Ontario universities has not grown by extraordinary amounts. As Figure 22 demonstrates, during the past decade universities in the other provinces have been much more successful at obtaining federal government grants and contracts, most of which is used for sponsored research activity.

Each federal research council has reduced the proportion of its funding going to Ontario universities so that the share of grants and contracts going to Ontario universities has fallen from 40% to 33% over the course of the past decade.

Within the operating fund, the costs of employee benefits have grown significantly, but as Figure 23 shows, benefits paid by universities still lag considerably behind those paid by the Ontario government to its own employees. Most of the growth of benefit costs for universities has been in benefits which are imposed by either the federal or the provincial governments. As Tables 28 and 29 demonstrate, these statutory benefits have grown from 27% or 28% of the total at the beginning of the 1980s to over 40% at the beginning of the 1990s.

The biggest increases in benefits expenditures were caused by the growth of the costs of the Unemployment Insurance Commission and the creation, by the Ontario government, of the Employer Health Tax.

Except for the research enterprise and employee benefit costs, most expenditures have declined. Salary costs certainly have not kept up with inflation or enrolment growth. As Table 30 demonstrates, after adjusting for inflation,

Ontario universities can be seen to be spending 17% less on salaries for each student enrolled than they were in 1977-78.

This decline in staffing costs per student has affected equally both the academic and non-academic staff.

In the important area of library acquisitions, universities have been able to maintain these expenditures as a relatively fixed share of total

spending. However, this has not enabled universities to keep library acquisitions growing enough to match the increased cost of books and periodicals and the increased number of students. As Figure 24 and Table 31 indicate,

> ***the value of library acquisitions for each student enrolled is 43% less than it was in 1977-78.***

A similar picture exists for the physical infrastructure of Ontario universities. As Figure 25 and Table 32 demonstrate, between the mid-1970s and the mid-1980s the Ontario government provided very little in the way of capital support for Ontario universities. Buildings and equipment were neglected for over a decade. This situation improved somewhat in the late 1980s and early 1990s but, as Table 33 demonstrates, over the entire period since 1977-78,

> ***Ontario universities have been able to spend less on buildings and on land and site services than have universities in seven of the nine other provinces.***

In some of those provinces, capital expenditures have been twice or three times as great as in Ontario.

Figure 26 and Table 34 demonstrate that university buildings in Ontario have been depreciating faster than they have been replaced or renovated. The physical infrastructure of Ontario universities is declining in value as buildings age without being upgraded or replaced.

CONCLUSION

The crisis of underfunding at Ontario universities continues and deepens. After many years of seeing grants from the provincial government increase at a rate which was insufficient to keep up with inflation and enrolment growth, universities are now in a situation where grants from the provincial government are declining from one year to the next. Smaller and smaller revenues are totally inadequate and ensure that universities are less and less able to cope with both inflation and ever increasing enrolments. Public policy must be reversed and the level of financial support from the Ontario government increased substantially. Additional revenue must be found from other sources. Failure to restore funding levels for Ontario universities will mean that both quality and accessibility will be reduced significantly.

Figures and Tables

FIGURE 1 *Canadian Unemployment Rates by Educational Attainment*

1977 to 1992

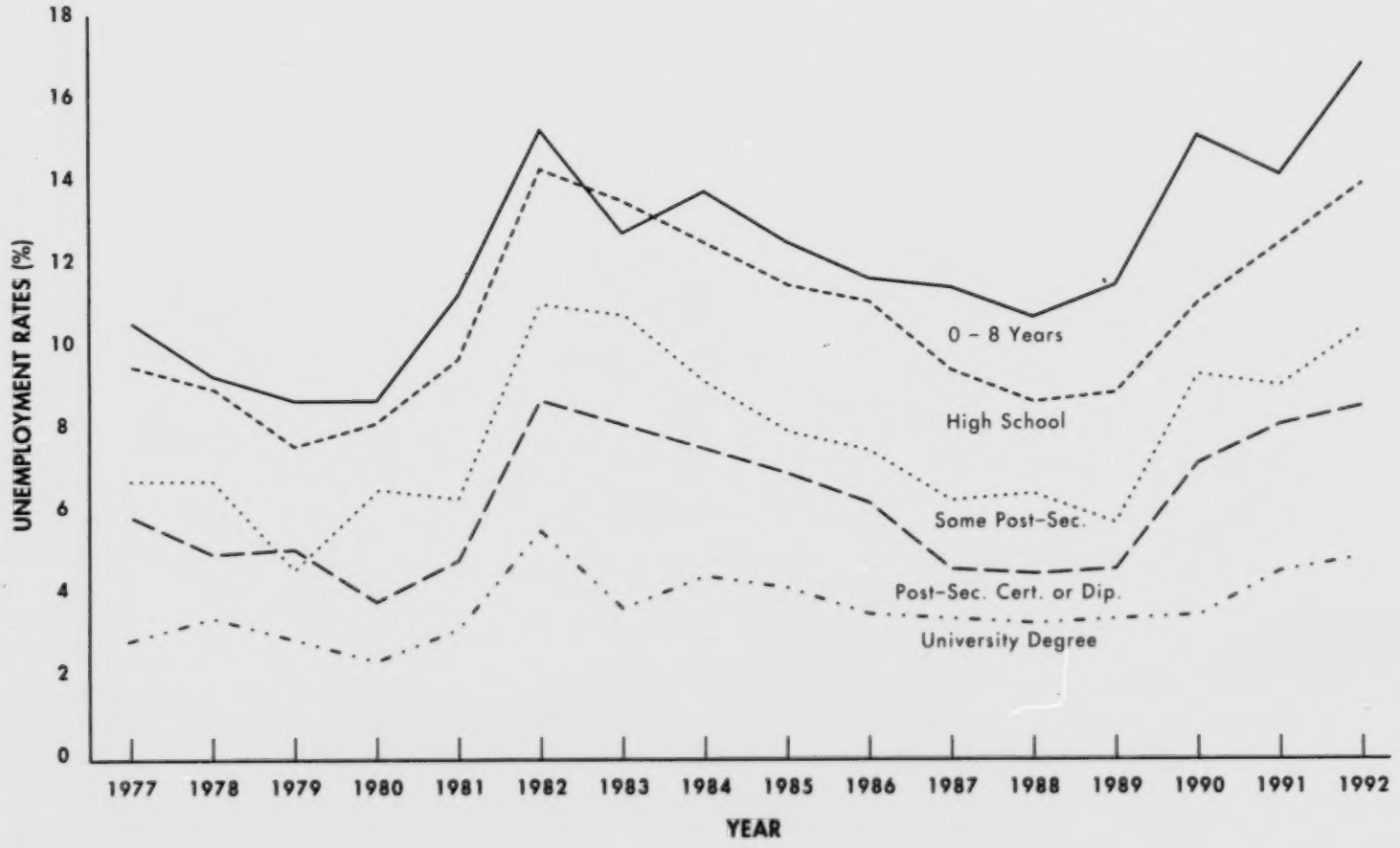

TABLE 1 *Canadian Unemployment and Participation Rates by Educational Attainment*

	Unemployment Rates* (%)																Participation Rates**
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1992
Total Canadian Labour Force	8.3	7.9	7.0	7.1	8.5	12.7	11.1	10.7	9.8	9.3	7.9	7.4	7.5	9.3	10.2	11.2	64.5
0 - 8 years	10.5	9.4	9.0	9.0	11.3	15.6	12.6	14.1	12.7	11.9	11.8	11.0	11.7	15.5	14.6	17.2	32.0
High School	9.5	9.0	7.8	8.3	10.0	14.8	13.2	12.5	11.7	11.3	9.4	8.9	9.1	11.3	12.7	14.3	61.5
Some Post-Secondary	6.9	7.0	4.8	6.7	6.6	11.1	11.0	9.4	8.2	7.7	6.6	6.8	6.0	9.4	9.3	10.8	68.6
Post-Secondary Certificate or Diploma	6.0	5.2	5.3	4.0	5.0	8.9	8.3	7.7	7.2	6.4	5.0	4.9	5.1	7.3	8.4	9.0	78.0
University Degree	3.0	3.4	2.8	2.4	3.2	5.9	3.8	4.6	4.4	3.8	3.6	3.5	3.6	3.8	4.8	5.0	83.5

Source: Estimates by Educational Attainment. The Labour Force Monthly Report. Statistics Canada.

* As of December of each year.

** Labour Force percentage of population 15 years and over.

FIGURE 2 *Participation Rates by Educational Attainment*

1977 to 1992

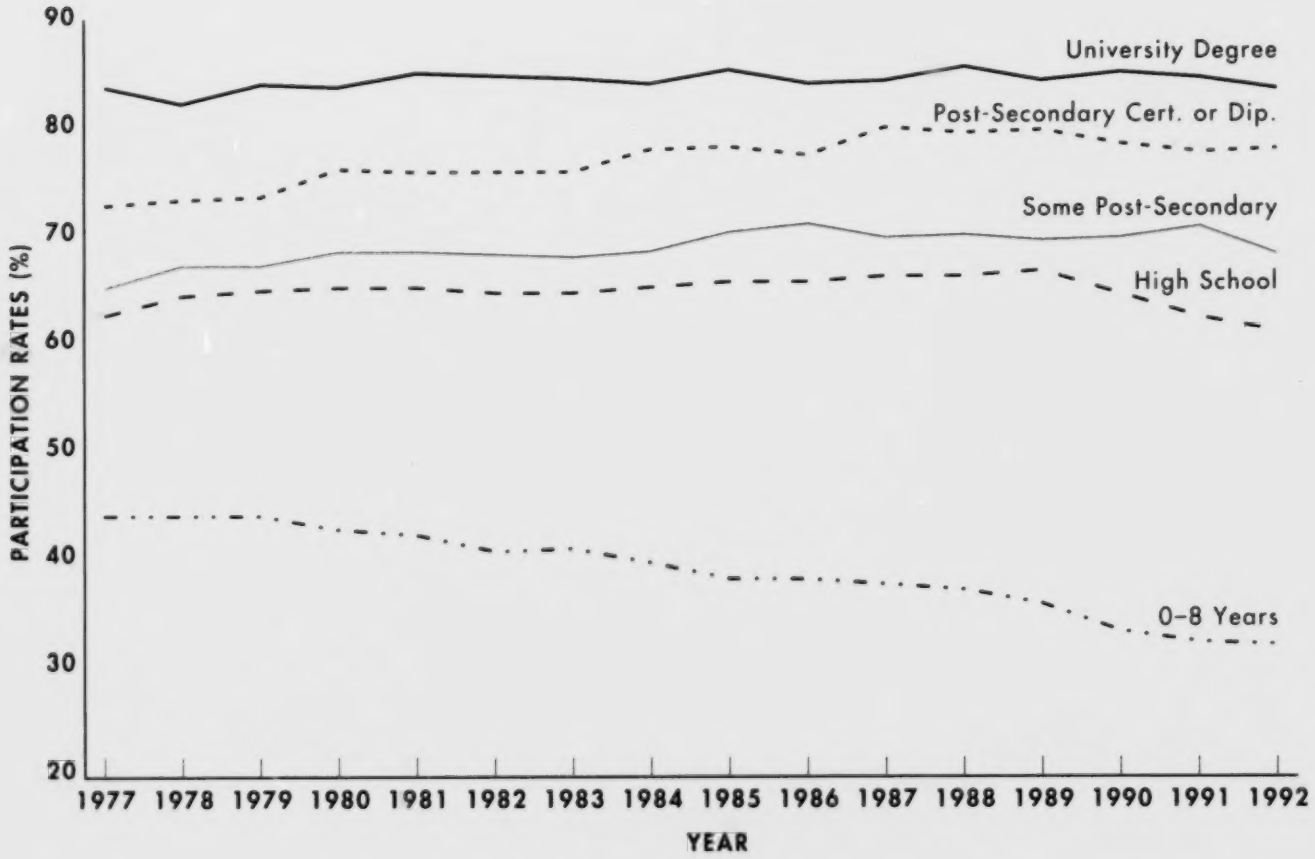

FIGURE 3 *Employment by Educational Level, Percent Change*

1990 to 1991 and 1991 to 1992

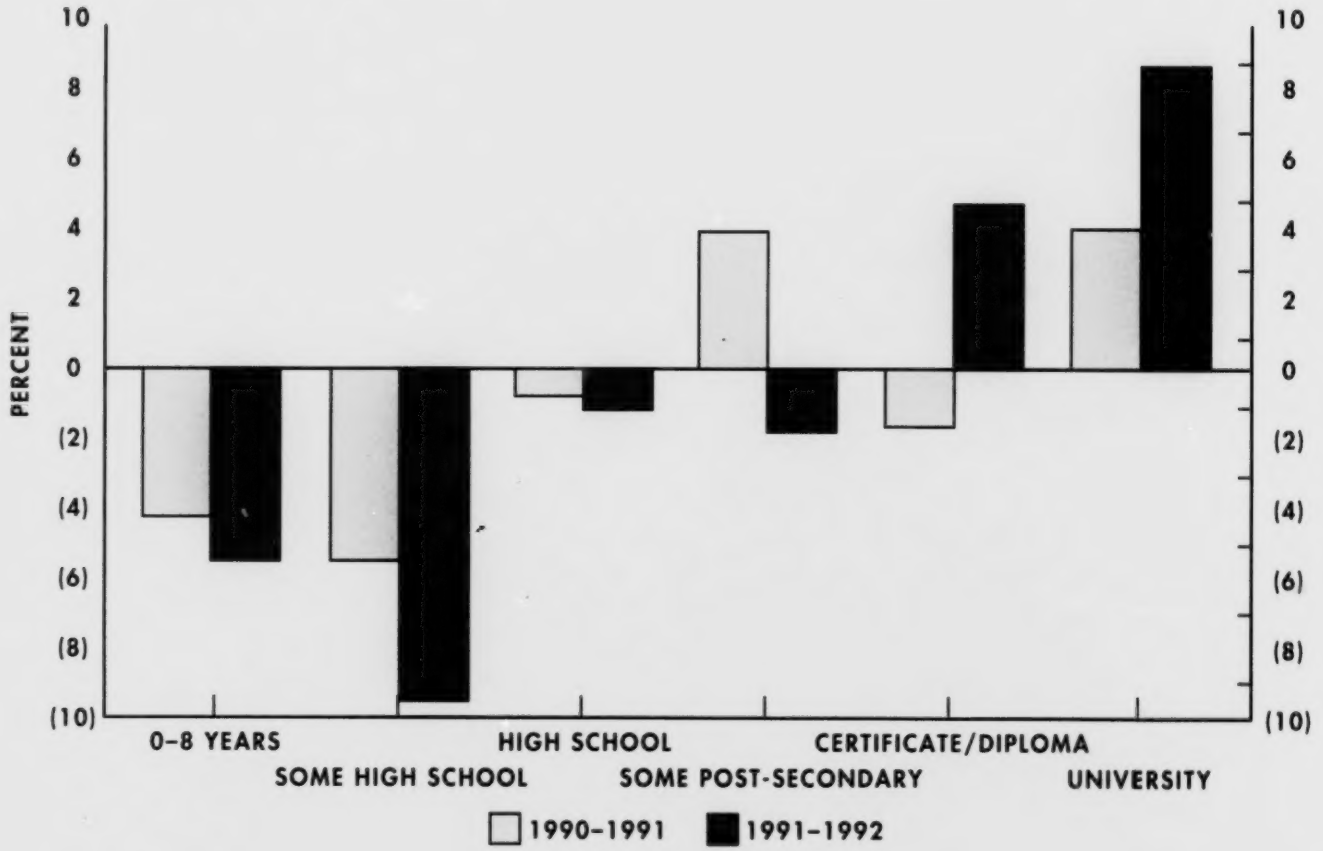

TABLE 2 *Employment by Level of Education*

Ontario (thousands)

	1990 *	Percent Change	1991 *	Percent Change	1992 *
Total Labour Force	4,819	-2.2	4,711	+0.1	4,714
0-8 years	275	-6.9	256	+0.4	257
Some High School	979	-5.6	924	-13.2	802
High School Graduation	1,124	-1.3	1,109	-1.0	1,098
Some Post-Secondary	460	-3.7	443	+4.1	461
PS Certificate or Diploma	1,179	-4.4	1,127	+7.4	1,210
University Degree	801	+6.4	852	+3.9	885

Source: Estimates by Educational Attainment. The Labour Force Monthly Report, Statistics Canada.

* As of December of each year.

FIGURE 4 *Average Income by Educational Attainment*

Canada and Ontario, 1991

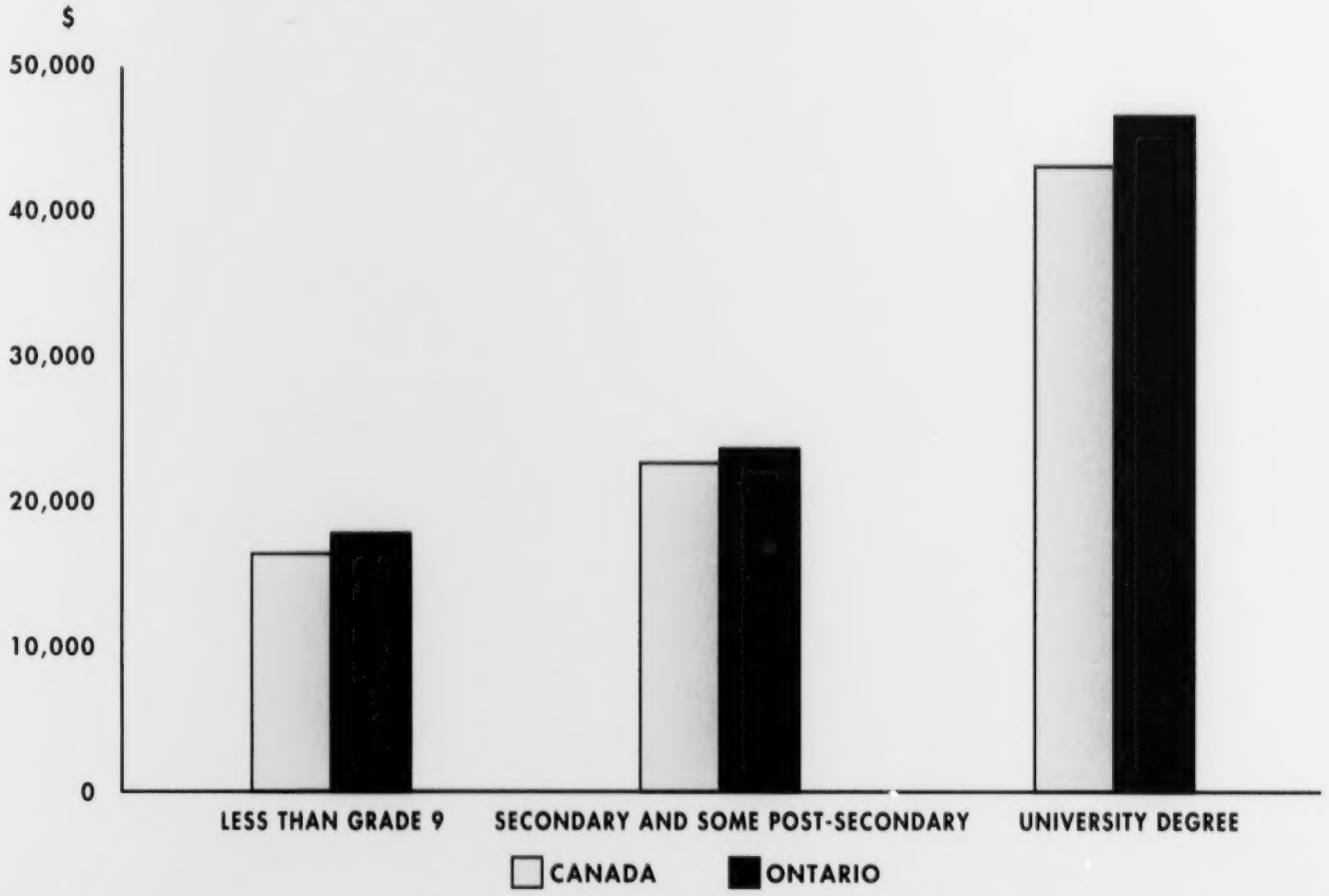

TABLE 3 *Average Income by Educational Attainment*

Canada and Ontario, 1991

	Canada	Ontario
University Degree	$42,991	$46,532
Secondary and some post-secondary	22,421	23,374
Less than Grade 9	16,280	17,822

Source: Statistics Canada, Census Canada 1991

FIGURE 5 *Enrolment at Ontario Universities*

1977–78 to 1992–93

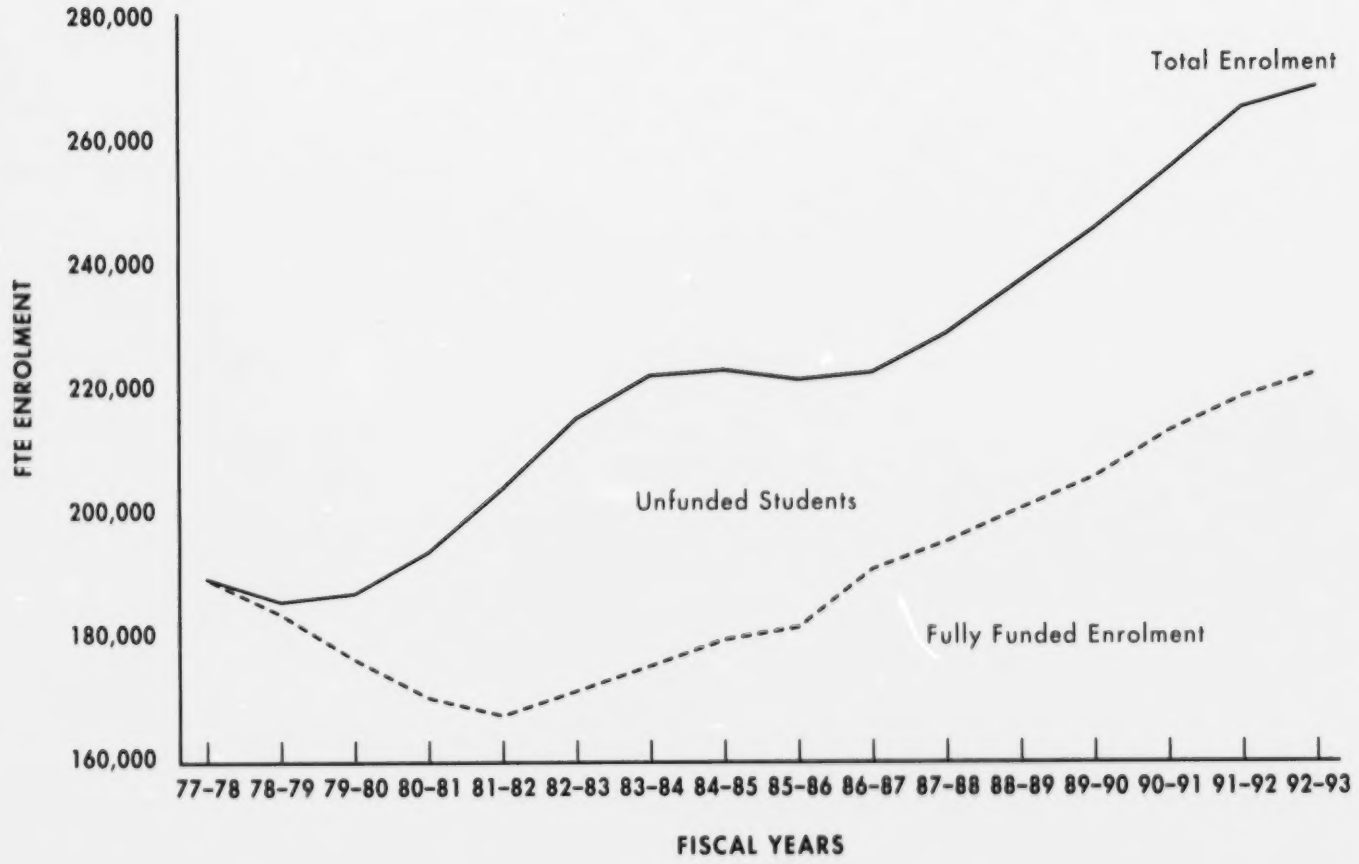

TABLE 4 *Funded and Unfunded Enrolment at Ontario Universities*

1977–78 to 1992–93

	FTE Enrolment	Unfunded Students
1977-78	189,046.7	0.0
1978-79	185,529.1	2,317.6
1979-80	186,777.5	10,539.8
1980-81	193,229.4	23,214.9
1981-82	202,670.8	35,702.4
1982-83	213,907.4	42,742.8
1983-84	220,821.3	45,838.9
1984-85	221,914.5	42,618.7
1985-86	220,201.1	39,229.4
1986-87	221,020.4	30,865.6
1987-88	227,240.8	33,060.1
1988-89	235,895.7	36,280.4
1989-90	243,733.9	39,291.9
1990-91	253,384.5	41,938.6
1991-92	263,446.8	46,492.2
1992-93	267,030.6	46,466.6

FIGURE 6 *Index of Expenditures per Client Served*

Ontario, 1977–78 to 1991–92 (Constant Dollars)

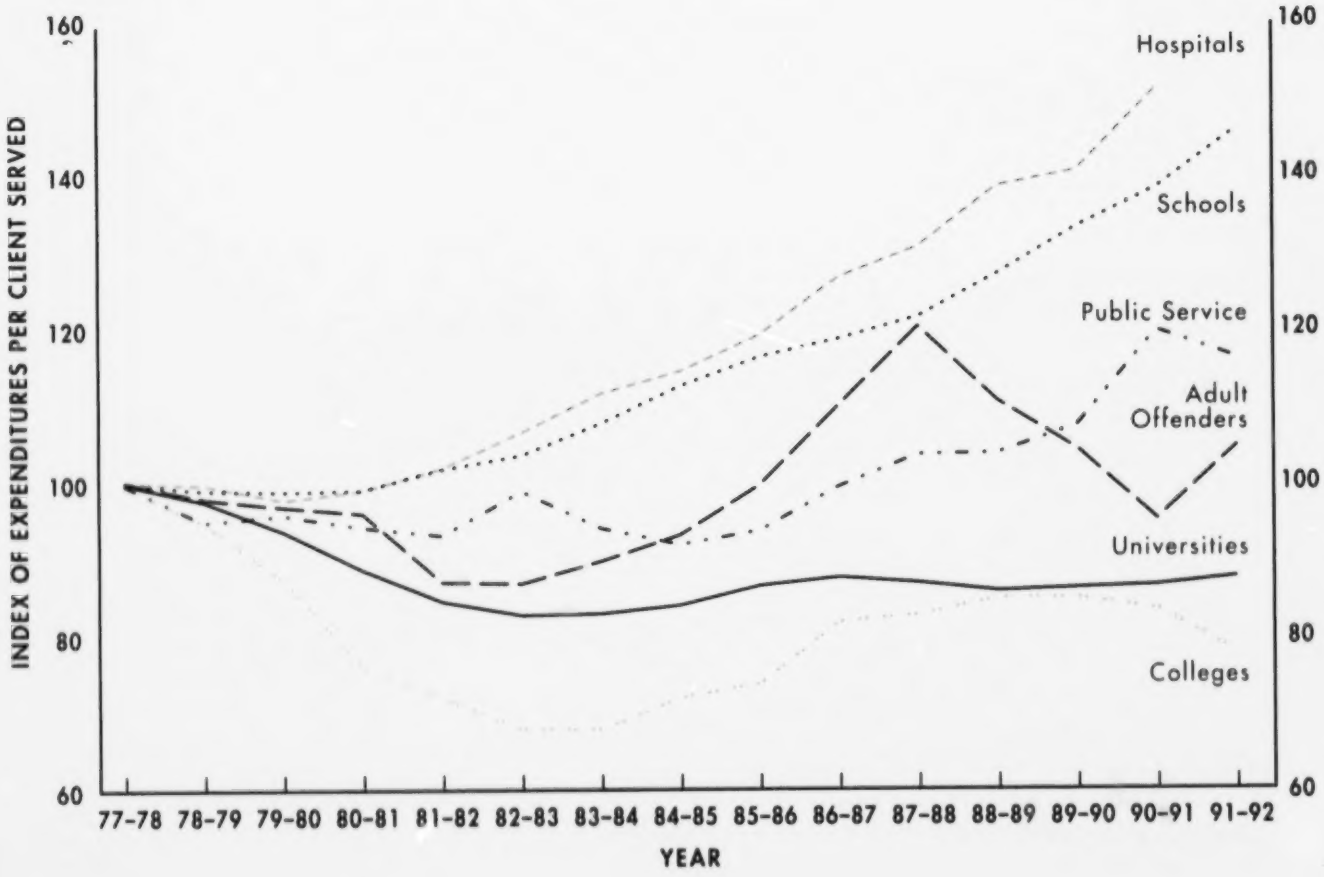

TABLE 5 *Expenditures per Client Served, 1977–78 to 1991–92*

		1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Elementary & Secondary Education (total school costs per pupil) [1]	Actual	$2,083	$2,240	$2,468	$2,735	$3,149	$3,517	$3,859	$4,173	$4,505	$4,761	$5,111	$5,570	$6,156	$6,692	$7,379
	Constant	5,019	4,945	4,988	4,975	5,105	5,214	5,441	5,665	5,874	5,956	6,133	6,413	6,729	6,960	7,379
	Index	100.0	98.5	99.4	99.1	101.7	103.9	108.4	112.9	117.1	118.7	122.2	127.8	134.1	138.7	147.0
Hospitals (gross operating costs per diem) [2]	Actual	$151.91	$165.06	$177.19	$199.15	$230.06	$264.67	$289.52	$311.06	$337.82	$370.80	$401.88	$440.42	$470.85	$533.21	n /a
	Constant	365.99	364.37	358.12	362.25	372.98	392.37	408.25	422.25	440.50	463.88	482.20	507.04	514.71	554.55	0.00
	Index	100.0	99.6	97.8	99.0	101.9	107.2	111.5	115.4	120.4	126.7	131.8	138.5	140.6	151.5	0.0
CAATs (operating cost per provincially – funded FTE student) [3]	Actual	$3,949	$4,083	$4,113	$3,979	$4,222	$4,339	$4,602	$5,059	$5,427	$6,216	$6,555	$7,065	$7,386	$7,603	$7,361
	Constant	9,514	9,013	8,313	7,238	6,845	6,432	6,489	6,867	7,076	7,776	7,865	8,134	8,074	7,907	7,361
	Index	100.0	94.7	87.4	76.1	71.9	67.6	68.2	72.2	74.4	81.7	82.7	85.5	84.9	83.1	77.4
Adult Offenders (expenditure per inmate day) [4]	Actual	$47.50	$50.97	$55.09	$60.32	$61.22	$66.80	$73.16	$78.17	$87.83	$101.89	$115.10	$109.10	$109.00	$105.00	$121.07
	Constant	114.44	112.52	111.34	109.72	99.25	99.03	103.16	106.11	114.53	127.47	138.10	125.60	119.15	109.20	121.07
	Index	100.0	98.3	97.3	95.9	86.7	86.5	90.1	92.7	100.1	111.4	120.7	109.8	104.1	95.4	105.8
Universities (operating expense per FTE student) [5]	Actual	$4,723	$5,030	$5,277	$5,534	$5,929	$6,354	$6,697	$7,021	$7,557	$7,963	$8,252	$8,495	$8,967	$9,512	$9,962
	Constant	11,379	11,104	10,665	10,066	9,612	9,420	9,443	9,531	9,854	9,962	9,901	9,780	9,802	9,892	9,962
	Index	100.0	97.6	93.7	88.5	84.5	82.8	83.0	83.8	86.6	87.5	87.0	85.9	86.1	86.9	87.5
Ontario Public Service Per Capita [6]	Actual	$297.56	$309.29	$341.73	$370.30	$410.35	$480.08	$477.25	$483.38	$515.72	$573.44	$619.43	$649.17	$708.15	$827.86	$834.76
	Constant	716.91	682.77	690.67	673.57	665.27	711.71	672.96	656.17	672.46	717.39	743.23	747.37	774.11	860.99	834.76
	Index	100.0	95.2	96.3	94.0	92.8	99.3	93.9	91.5	93.8	100.1	103.7	104.2	108.0	120.1	116.4

Sources: 1 Ministry of Education.
2 Ministry of Health, Hospital Statistics, various years.
3 Ministry of Colleges and Universities.
4 Ministry of Correctional Services.
5 Ministry of Colleges and Universities, MCU Financial Report, various years; COU Special Committee on Macro – Indicators Ontario Universities Statistical Compendium, various years, and Council of Finance Officers – Universities of Ontario, Financial Report of Ontario Universities, various years.
6 Total Expenditures Minus Transfer Payments and Public Debt Interest Per Capita. Ontario Public Accounts and Statistics Canada.

FIGURE 7 *Transfer Payments to Medical Doctors, Universities and Faculty*

1977–78 to 1993–94

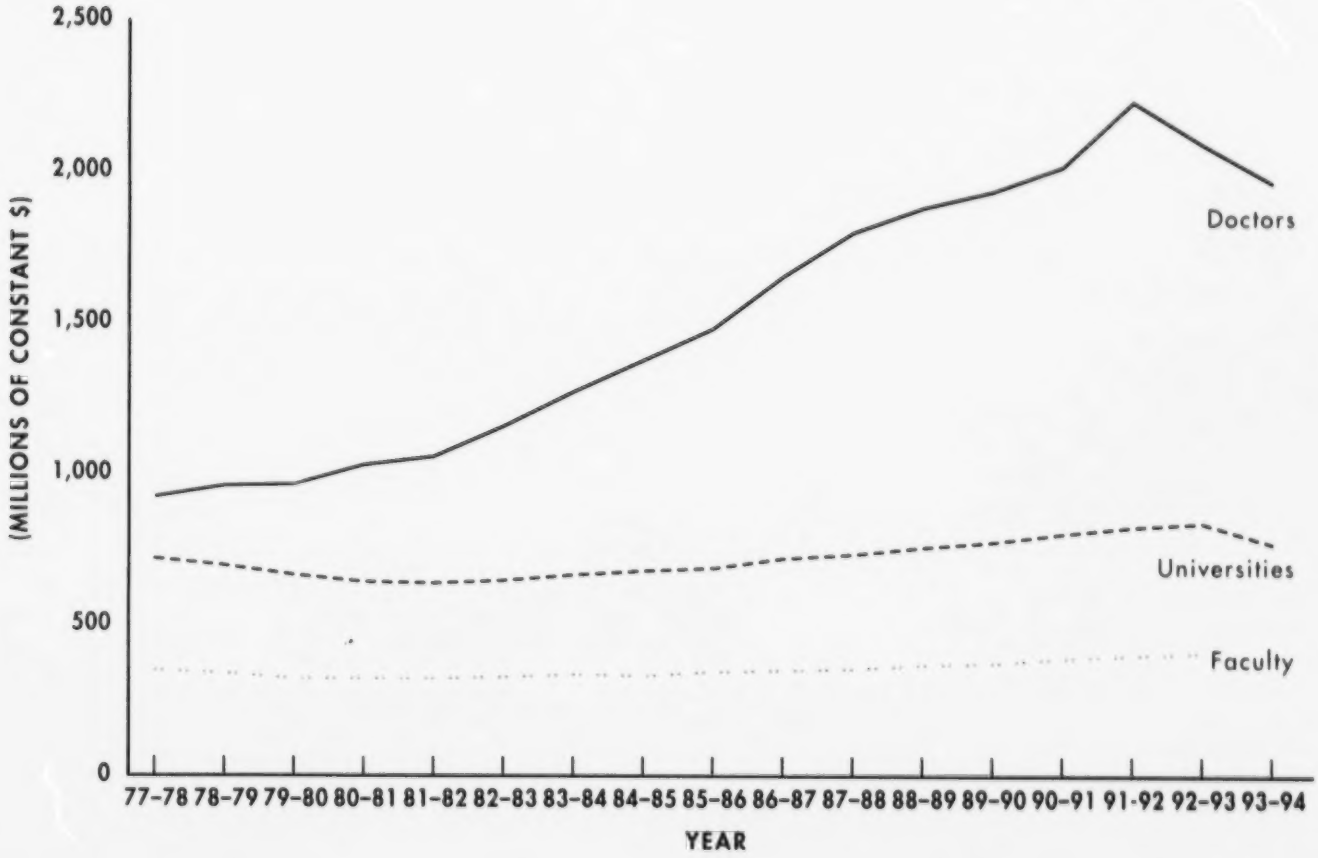

TABLE 6 *Transfer Payments to Medical Doctors, Universities, and Faculty*

1977–78 to 1993–94 ($ Millions)

	OHIP Payments to Physicians and Practitioners			Salaries of University Faculty with Academic Rank			Operating Grants to Universities		
	Actual Dollars	Constant 1977-78 Dollars	Index	Actual Dollars	Constant 1977-78 Dollars	Index	Actual Dollars	Constant 1977-78 Dollars	Index
1977-78	$898.2	$898.2	100.0	$340.5	$340.5	100.0	$703.6	$703.6	100.0
1978-79	1,023.3	937.6	104.4	358.6	328.6	96.5	744.2	681.9	96.9
1979-80	1,122.0	941.2	104.8	378.1	317.2	93.2	781.9	655.9	93.2
1980-81	1,334.3	1,007.4	112.2	410.4	309.9	91.0	838.1	632.8	89.9
1981-82	1,543.0	1,038.3	115.6	460.1	309.6	90.9	923.5	621.4	88.3
1982-83	1,846.5	1,135.8	126.4	521.2	320.6	94.2	1,035.7	637.0	90.5
1983-84	2,149.3	1,257.9	140.0	556.7	325.8	95.7	1,112.8	651.3	92.6
1984-85	2,416.4	1,361.1	151.5	583.8	328.8	96.6	1,184.7	667.3	94.8
1985-86	2,723.7	1,473.8	164.1	617.8	334.3	98.2	1,244.8	673.5	95.7
1986-87	3,177.4	1,650.0	183.7	658.4	341.9	100.4	1,362.9	707.7	100.6
1987-88	3,628.2	1,806.4	201.1	706.9	351.9	103.4	1,451.6	722.7	102.7
1988-89	3,936.5	1,880.9	209.4	759.9	363.1	106.6	1,554.9	742.9	105.6
1989-90	4,244.0	1,925.7	214.4	819.1	371.7	109.2	1,676.9	760.9	108.1
1990-91	4,692.5	2,025.9	225.6	888.1	383.4	112.6	1,822.8	787.0	111.8
1991-92	5,348.2	2,220.2	247.2	954.6	396.3	116.4	1,945.1	807.5	114.8
1992-93	5,032.8	2,056.4	228.9	980.0	400.4	117.6	2,009.1	820.9	116.7
1993-94 (est.)	4,837.7	1,943.2	216.3	.	.	.	1,881.6	755.8	107.4

Source: Ontario, Public Accounts, various years.

Ontario, Expenditure Estimates, 1993-94
COFO-UO, Financial Report of Ontario Universities, various years.

FIGURE 8 *Community and Social Services Total Expenditures and Transfer Payments*

1977–78 to 1993–94

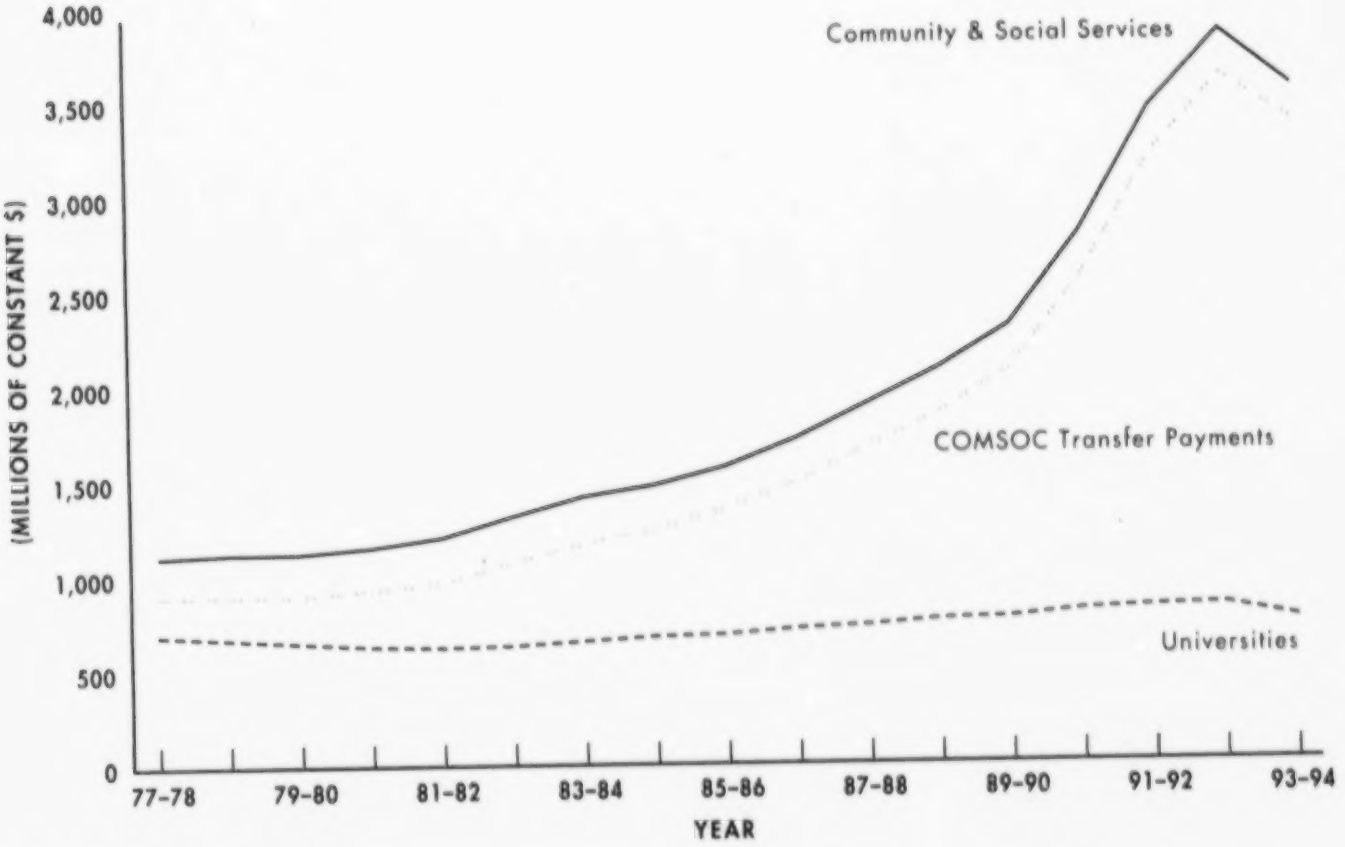

TABLE 7 *Community and Social Services Transfer Payments and Operating Grants to Universities, 1977–78 to 1993–94*

(Constant 1977–78 $ Millions and % of Provincial Budgetary Expenditures)

	Community and Social Services Transfer Payments			Operating Grants to Universities		
	$	Index	%	$	Index	%
1977-78	$900.8	100.0	6.86	$703.6	100.0	5.36
1978-79	899.4	99.8	6.93	681.9	96.9	5.26
1979-80	897.1	99.6	6.97	655.9	93.2	5.10
1980-81	924.7	102.7	7.27	632.8	89.9	4.98
1981-82	962.3	106.8	7.28	621.4	88.3	4.70
1982-83	1,071.4	118.9	7.74	637.3	90.6	4.60
1983-84	1,171.1	130.0	8.15	651.3	92.6	4.53
1984-85	1,237.6	137.4	8.31	667.5	94.9	4.48
1985-86	1,328.4	147.5	8.38	673.7	95.8	4.25
1986-87	1,475.9	163.9	8.83	707.7	100.6	4.24
1987-88	1,651.2	183.3	9.49	722.9	102.7	4.15
1988-89	1,823.4	202.4	9.85	743.0	105.6	4.01
1989-90	2,054.4	228.1	10.88	760.9	108.1	4.03
1990-91	2,517.2	279.4	12.70	786.9	111.8	3.97
1991-92	3,183.1	353.4	14.84	807.3	114.7	3.76
1992-93	3,590.5	398.6	16.36	820.9	116.7	3.74
1993-94 (est.)	3,356.9	372.7	16.56	756.1	107.5	3.73

Source: Ontario, Public Accounts, various years
Ontario, Expenditure Estimates 1993-94

FIGURE 9 *Variance Between Growth in University Grants and Provincial Budgetary Expenditures*

1977–78 to 1993–94

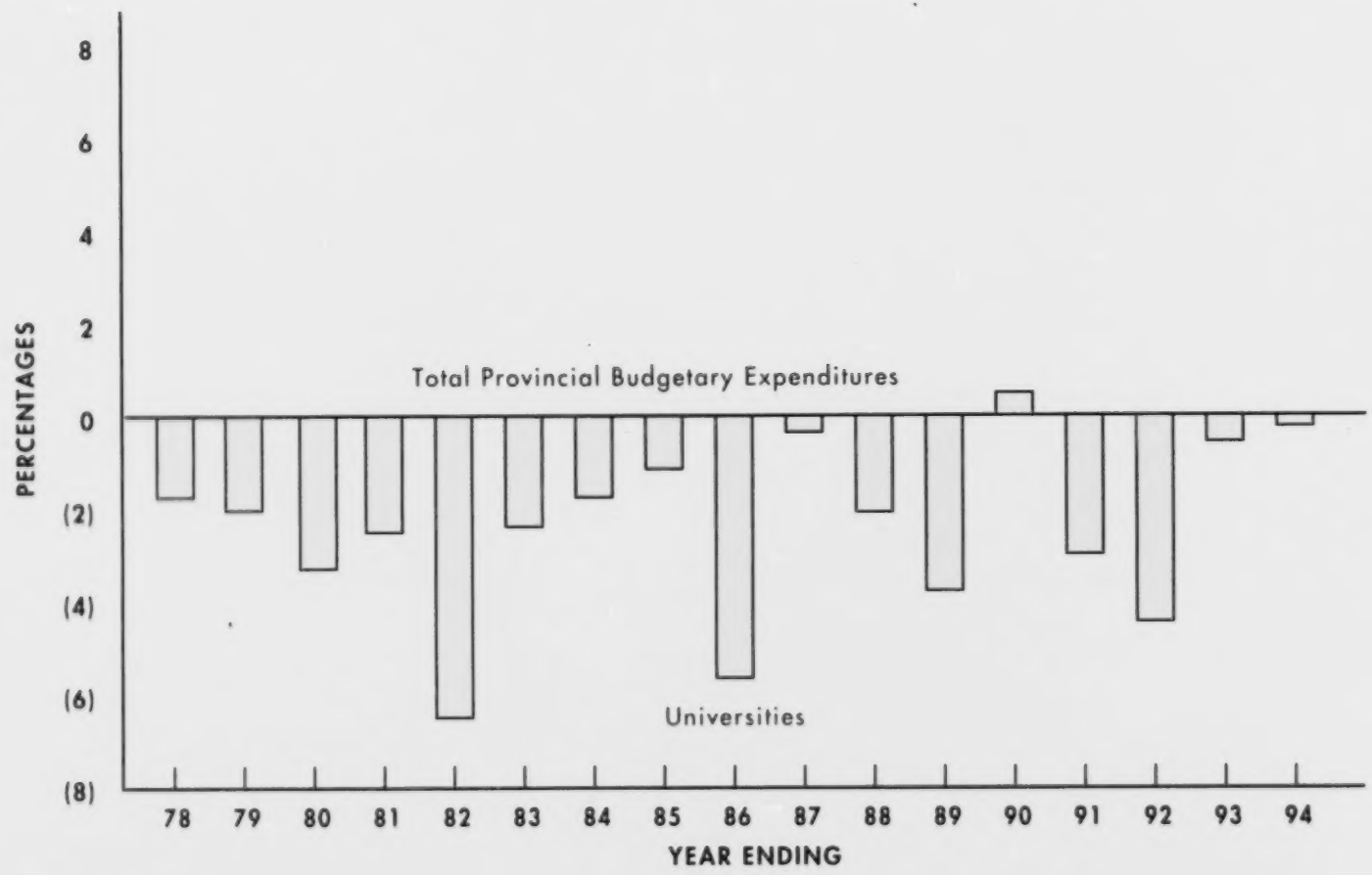

TABLE 8 *Percentage Increase in Provincial Operating Grants and Total Budgetary Expenditures*

1977–78 to 1993–94

	Operating Grants to Ontario Universities	Total Provincial Budgetary Expenditures	Universities Difference from Provincial Annual Increase
1977-78	8.4	10.1	(1.7)
1978-79	5.8	7.8	(2.0)
1979-80	5.1	8.4	(3.3)
1980-81	7.2	9.7	(2.5)
1981-82	10.2	16.7	(6.5)
1982-83	12.1	14.5	(2.4)
1983-84	7.4	9.1	(1.7)
1984-85	6.5	7.6	(1.1)
1985-86	5.1	10.8	(5.7)
1986-87	9.5	9.8	(0.3)
1987-88	6.5	8.6	(2.1)
1988-89	7.1	10.9	(3.8)
1989-90	7.8	7.4	0.4
1990-91	8.7	11.7	(3.0)
1991-92	6.7	11.2	(4.5)
1992-93	3.3	3.9	(0.6)
1993-94 (est.)	-6.3	-6.1	(0.2)
Average	6.5	9.0	(2.5)

Source: Province of Ontario, Public Accounts, various years.
Province of Ontario, Expenditure Estimates, 1993-94

Note: Estimates of total provincial budgetary expenditure increases have been consistently understated. This has resulted in consistently underestimating the differences between increases in grants to universities, which normally do not change during the fiscal year, and increases in total provincial budgetary expenditures.

FIGURE 10 *Universities' Share of Provincial Budgetary Expenditures*

1977–78 to 1993–94

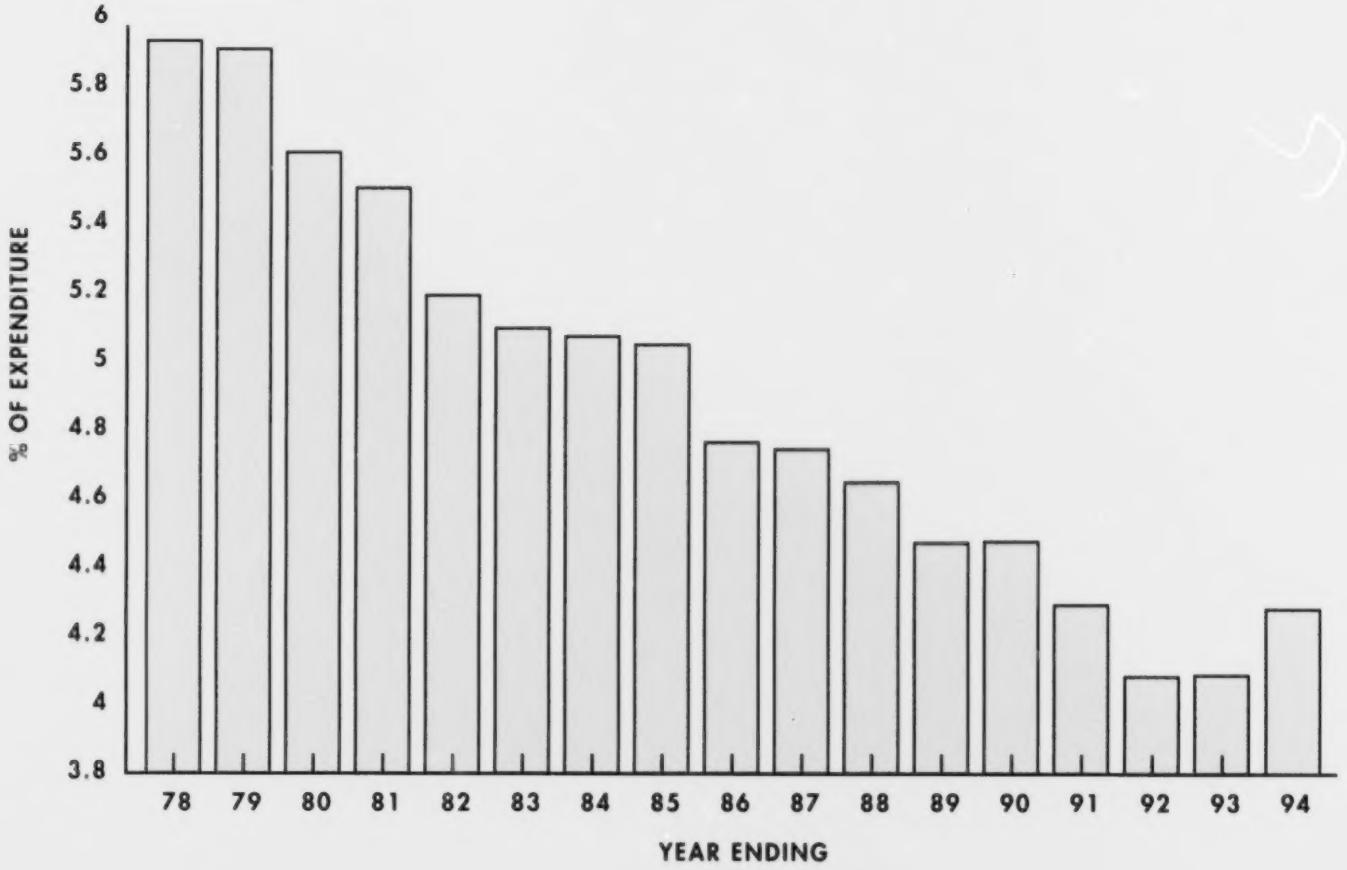

TABLE 9 *Ontario Universities' Share of Provincial Budgetary Expenditures*

(Excluding Public Debt Interest Payments)

	Universities' Share	Universities' Annual Shortfall from 1977–78 Level of Government Support	
	%	%	$ millions
1977-78	5.92	–	–
1978-79	5.87	0.86	6.5
1979-80	5.61	5.22	43.1
1980-81	5.50	7.09	64.0
1981-82	5.18	12.44	131.2
1982-83	5.08	14.22	171.7
1983-84	5.05	14.62	190.5
1984-85	5.04	14.86	206.8
1985-86	4.78	19.26	296.9
1986-87	4.76	19.60	332.2
1987-88	4.66	21.32	393.4
1988-89	4.48	24.30	499.1
1989-90	4.49	24.08	531.9
1990-91	4.33	26.93	671.7
1991-92	4.10	30.80	865.6
1992-93	4.15	29.89	856.5
1993-94 (est.)	4.35*	26.58	681.2

Source: Ontario, Public Accounts, various years. 1993-94 Expenditure Estimates
1993 Ontario Budget

* Estimates of total provincial budgetary expenditures have been consistently understated. This has resulted in consistently overestimating the universities' share of provincial budgetary expenditures.

FIGURE 11 *Growth of Ontario Government Expenditures and Grants to Universities Relative to Growth of GDP*

1977–78 to 1993–94

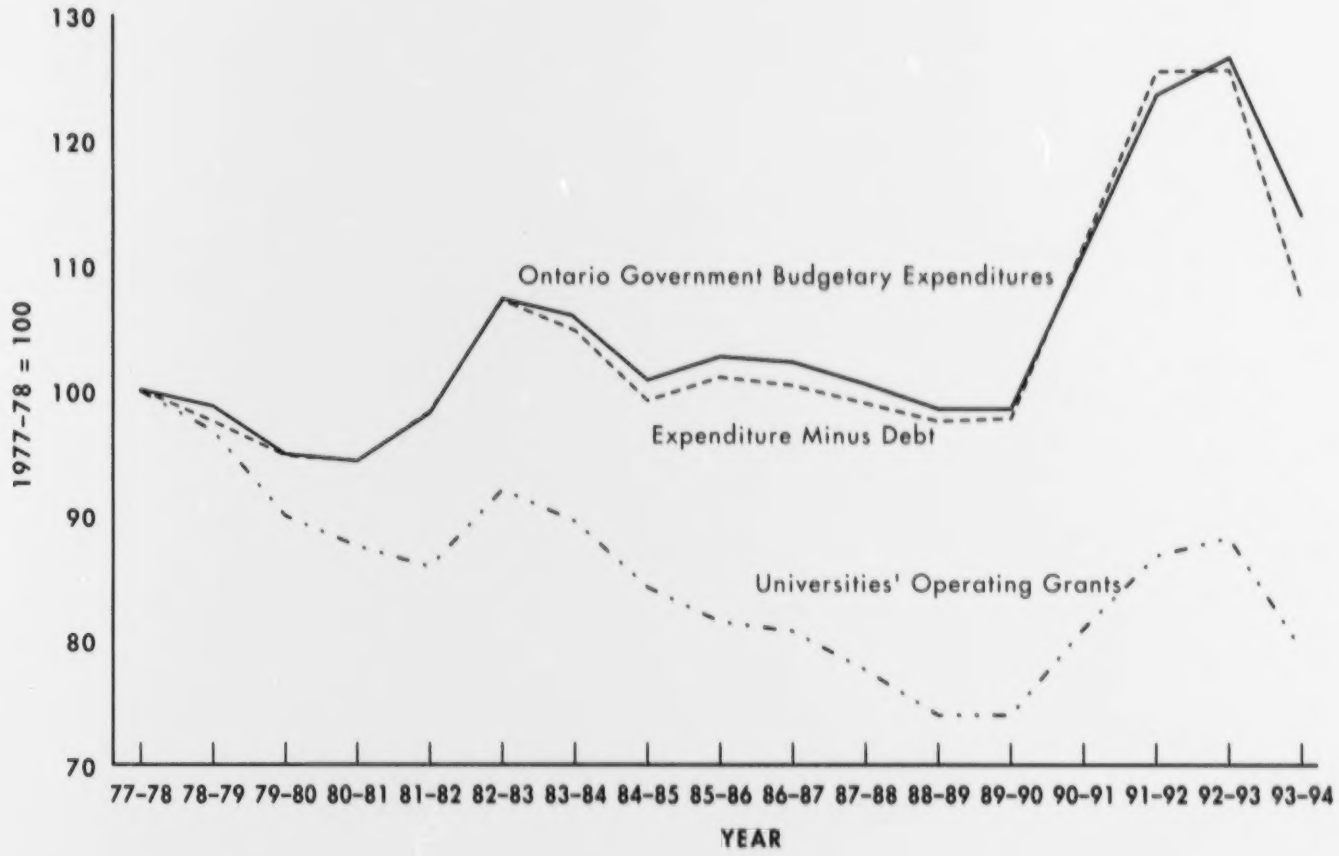

TABLE 10 — *Growth of Ontario Government Expenditures and Grants to Universities Relative to the Growth of the Gross Domestic Product 1977–78 to 1993–94*

	Growth of Government vs. GDP	Government Minus Debt Interest vs. GDP	Growth of Universities' Grants vs. GDP
1977-78	100.0	100.0	100.0
1978-79	98.8	97.7	96.9
1979-80	94.8	95.1	90.2
1980-81	94.4	94.4	87.7
1981-82	98.0	98.1	85.9
1982-83	107.4	107.5	92.2
1983-84	105.9	104.9	89.6
1984-85	100.9	99.1	84.4
1985-86	102.8	101.0	81.5
1986-87	102.4	100.6	80.9
1987-88	100.6	99.2	78.0
1988-89	98.7	97.7	74.0
1989-90	98.5	97.6	74.1
1990-91	110.0	110.2	80.6
1991-92	123.2	125.0	86.5
1992-93	126.1	125.6	88.0
1993-94	113.7	107.8	79.2

Note: The three columns of data compare the rates of growth of government expenditures (including and excluding debt payments) and grants to universities with the rate of growth of the economy. That is, an index value of 100.0 indicates an identical growth rate to that of the GDP, a lesser value indicates a lower rate of growth, and a value greater than 100.0 indicates a growth rate greater than the growth rate of the GDP.

Source: Public Accounts of Ontario, various years
1993 Ontario Budget

FIGURE 12 *Operating Grants to Universities per FTE Student*

1977–78 to 1993–94 (Constant 1993–94 Dollars)

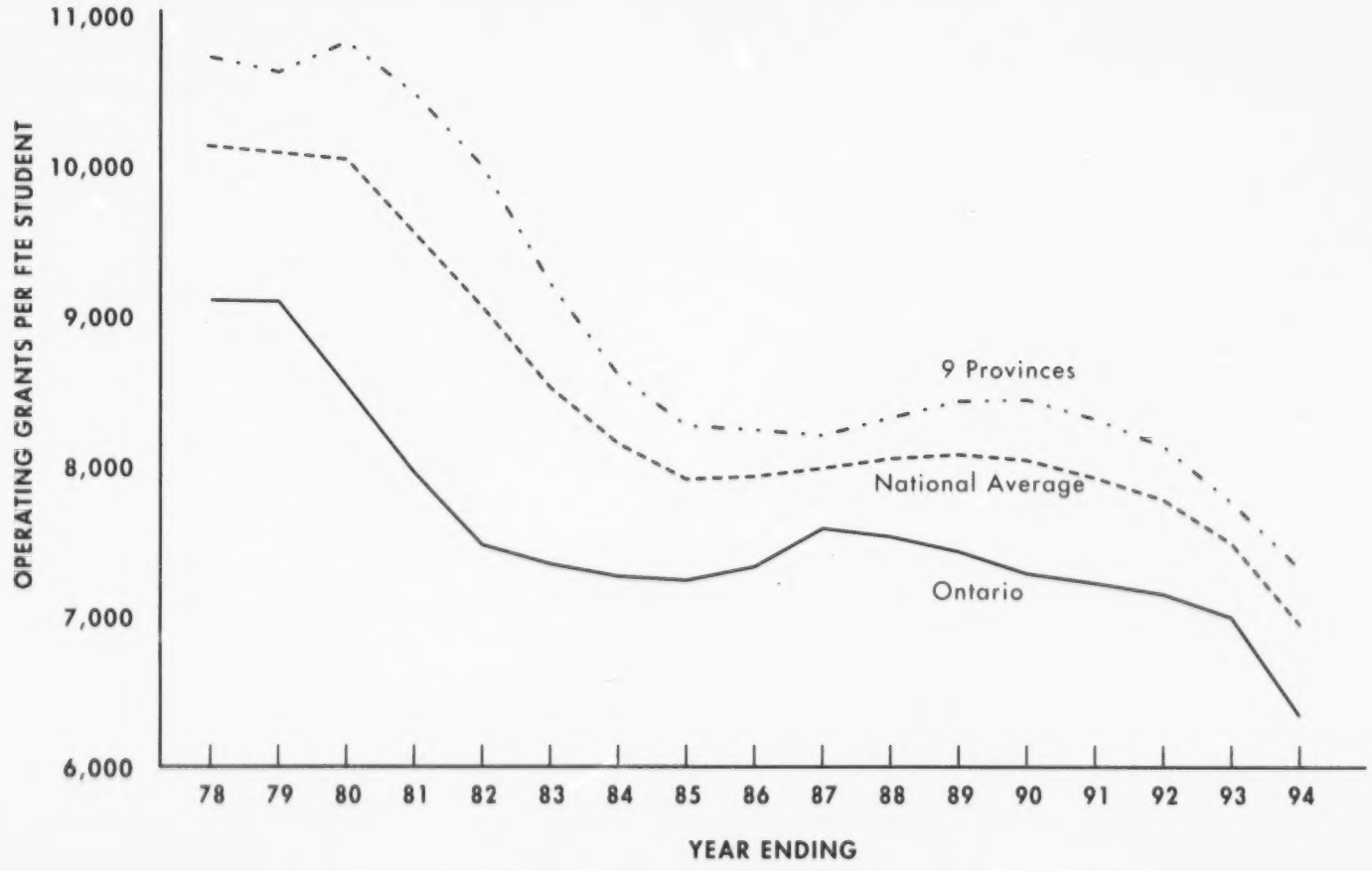

TABLE 11 *Interprovincial Comparisons of Operating Grants to Universities per FTE Student*

1977–78 to 1993–94

	1977 –78	1978 –79	1979 –80	1980 –81	1981 –82	1982 –83	1983 –84	1984 –85	1985 –86	1986 –87	1987 –88	1988 –89	1989 –90	1990 –91e	1991 –92e	1992 –93e	1993 –94e
British Columbia	$4,410	$4,903	$5,204	$5,528	$6,217	$6,193	$5,873	$5,810	$5,784	$5,988	$6,384	$6,439	$7,076	$7,203	$7,097	$7,158	$7,062
	(4)	(3)	(4)	(4)	(2)	(3)	(4)	(4)	(7)	(8)	(8)	(8)	(7)	(6)	(7)	(6)	(6)
Alberta	$4,797	$5,340	$5,815	$6,284	$6,812	$7,328	$7,182	$7,114	$7,264	$7,389	$7,158	$7,364	$7,493	$7,569	$7,829	$7,806	$7,602
	(1)	(2)	(2)	(1)	(1)	(1)	(2)	(1)	(1)	(1)	(2)	(3)	(4)	(5)	(4)	(4)	(2)
Saskatchewan	$4,108	$4,616	$5,098	$5,304	$5,619	$6,149	$6,235	$6,361	$6,686	$6,623	$6,748	$7,011	$7,215	$7,203	$7,263	$6,978	$6,689
	(5)	(5)	(5)	(5)	(5)	(4)	(3)	(3)	(3)	(3)	(6)	(6)	(6)	(7)	(6)	(7)	(7)
Manitoba	$3,874	$4,124	$4,771	$4,499	$5,062	$5,362	$5,582	$5,704	$6,073	$6,336	$6,804	$7,150	$7,483	$7,736	$7,680	$7,792	$7,498
	(7)	(7)	(6)	(7)	(7)	(7)	(6)	(5)	(4)	(5)	(4)	(5)	(5)	(4)	(5)	(5)	(5)
Quebec	$4,449	$4,657	$5,299	$5,935	$6,176	$5,915	$5,713	$5,613	$5,936	$6,193	$6,797	$7,340	$7,827	$8,298	$8,591	$8,105	$7,646
	(3)	(4)	(3)	(2)	(3)	(5)	(5)	(6)	(5)	(6)	(5)	(4)	(3)	(2)	(1)	(2)	(1)
New Brunswick	$3,905	$4,364	$4,755	$4,915	$5,185	$5,426	$5,274	$5,561	$5,779	$6,090	$6,428	$6,664	$6,908	$7,095	$6,895	$6,557	$6,296
	(6)	(6)	(7)	(6)	(6)	(6)	(8)	(8)	(8)	(7)	(7)	(7)	(8)	(8)	(9)	(9)	(9)
Nova Scotia	$3,476	$3,802	$4,042	$4,340	$4,996	$5,141	$5,158	$5,389	$5,537	$5,820	$5,971	$6,276	$6,305	$6,344	$6,091	$5,946	$5,801
	(9)	(9)	(10)	(9)	(8)	(9)	(9)	(9)	(9)	(10)	(10)	(9)	(10)	(10)	(10)	(10)	(10)
Prince Edward Island	$3,030	$3,544	$4,246	$4,430	$4,909	$5,312	$5,377	$5,569	$5,855	$6,609	$6,907	$7,771	$8,083	$8,166	$8,227	$7,939	$7,519
	(10)	(10)	(8)	(8)	(9)	(8)	(7)	(7)	(6)	(4)	(3)	(2)	(2)	(3)	(3)	(3)	(4)
Newfoundland	$4,625	$5,485	$5,994	$5,684	$5,847	$6,912	$7,788	$6,994	$6,761	$6,999	$7,460	$8,233	$8,668	$8,578	$8,326	$8,253	$7,548
	(2)	(1)	(1)	(3)	(4)	(2)	(1)	(2)	(2)	(2)	(1)	(1)	(1)	(1)	(2)	(1)	(3)
9 Provinces	$4,329	$4,686	$5,209	$5,618	$6,024	$6,072	$5,950	$5,923	$6,144	$6,372	$6,742	$7,119	$7,503	$7,763	$7,874	$7,627	$7,301
Ontario	$3,669	$4,002	$4,140	$4,273	$4,475	$4,821	$5,000	$5,180	$5,450	$5,885	$6,097	$6,271	$6,474	$6,745	$6,953	$6,891	$6,357
	(8)	(8)	(9)	(10)	(10)	(10)	(10)	(10)	(10)	(9)	(9)	(10)	(9)	(9)	(8)	(8)	(8)
Canada	$4,086	$4,443	$4,826	$5,138	$5,471	$5,628	$5,619	$5,662	$5,901	$6,201	$6,514	$6,816	$7,133	$7,395	$7,539	$7,362	$6,966

e = estimate

Source: Tripartite Committee on Interprovincial Comparisons, April 1992, for actual data. Statistics Canada and COU Research Division for estimates.

TABLE 12 *Interprovincial Comparisons of Total Operating Expenses per Client*

	HOSPITALS Total Operating Expenses Per Patient Day 1989–90		SCHOOLS School Board Expenditures Per Student 1989		UNIVERSITIES Total Operating Expenditures Per Student 1989–90	
British Columbia	$364.48	(7)	$5,328	(5)	$9,281	(5)
Alberta	439.22	(5)	5,261	(4)	9,431	(3)
Saskatchewan	337.18	(9)	4,888	(7)	9,177	(6)
Manitoba	486.38	(3)	5,475	(3)	8,997	(7)
Ontario	484.04	(4)	6,090	(2)	8,627	(10)
Quebec	340.42	(8)	6,011	(1)	9,377	(4)
New Brunswick	389.35	(6)	4,866	(6)	8,799	(9)
Nova Scotia	509.26	(1)	4,612	(8)	8,846	(8)
P.E.I.	331.47	(10)	4,096	(10)	11,802	(1)
Newfoundland	486.60	(2)	4,454	(9)	10,238	(2)

Source: Statistics Canada, Hospital Statistics - Preliminary
Statistics Canada, Financial Statistics of Education
Tripartite Committee on Interprovincial Comparisons, Interprovincial Comparisons of University Financing

TABLE 13 *Provincial Operating Grants For Universities*

per $1,000 of Provincial Personal Income

	1977 -78	1978 -79	1979 -80	1980 -81	1981 -82	1982 -83	1983 -84	1984 -85	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90	1990 -91	1991 -92e	Rank 1991-92
British Columbia	$10.23	$10.10	$9.50	$8.92	$8.60	$8.47	$8.11	$7.37	$6.76	$6.67	$6.82	$6.70	$6.99	$6.74	$6.72	(10)
Alberta	13.83	12.68	11.57	10.50	9.51	10.23	10.72	10.96	10.22	10.48	9.98	9.57	9.52	8.97	8.93	(8)
Saskatchewan	12.49	12.03	11.59	11.18	9.59	9.88	10.21	10.14	10.26	9.49	9.49	9.57	9.46	9.12	9.55	(7)
Manitoba	13.18	11.87	12.17	11.19	10.53	11.12	12.00	10.77	10.51	10.36	10.22	10.03	10.01	9.82	10.15	(6)
Quebec	13.35	13.66	13.90	14.34	13.86	12.79	12.33	11.20	11.34	11.19	11.51	11.75	11.91	11.87	12.30	(3)
New Brunswick	14.06	13.93	13.64	13.31	12.13	12.21	11.95	11.70	11.74	11.48	11.52	11.29	11.33	11.33	11.27	(5)
Nova Scotia	15.71	15.12	14.27	14.58	13.61	13.50	13.36	12.93	12.50	12.34	12.14	12.19	12.04	11.75	11.59	(4)
Prince Edward Island	12.14	11.27	11.68	11.43	10.27	10.88	10.69	10.27	11.01	11.27	11.83	11.77	12.12	12.38	12.39	(2)
Newfoundland	14.70	14.57	14.40	14.20	13.49	13.22	13.14	12.79	12.74	13.11	12.78	13.27	13.27	13.06	12.53	(1)
9 Provinces	12.91	12.69	12.44	12.22	11.47	11.20	11.11	10.46	10.26	10.17	10.23	10.23	10.31	10.09	10.26	
Ontario	9.83	9.35	8.75	8.39	8.05	8.18	8.01	7.75	7.56	7.65	7.44	7.18	7.06	7.23	7.56	(9)
(Rank)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(9)	(9)	(9)	(9)	(9)	(9)	(9)		
Canada	11.70	11.39	11.01	10.76	10.21	10.07	9.92	9.40	9.20	9.17	9.10	8.97	8.96	8.93	9.16	

e = estimate

Source: Tripartite Committee on Interprovincial Comparisons, April 1992, for actual data. Statistics Canada and COU Research Division for estimates.

FIGURE 13 *Growth of Grants to Universities Relative to GDP*

1977–78 to 1991–92

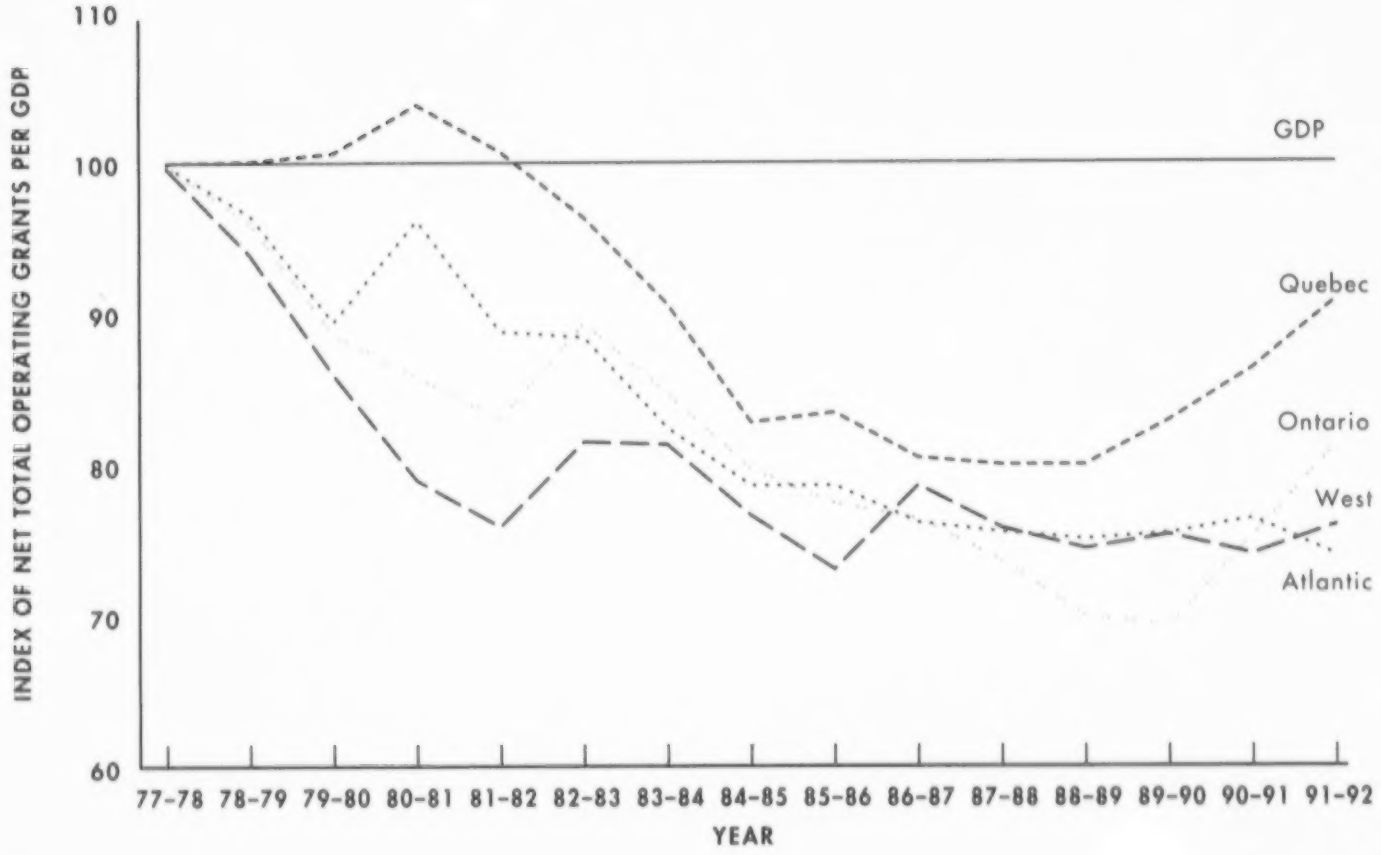

TABLE 14 *GDP Elasticity by Province, 1977–78 to 1991–92*

(Growth Rates of Provincial Operating Grants to Universities as a Ratio of GDP Growth)

	1977-78 to 1981-82	1981-82 to 1985-86	1985-86 to 1991-92	1977-78 to 1991-92	Rank
British Columbia	0.683	-0.086	1.119	0.613	(10)
Alberta	0.451	1.405	2.206	0.790	(6)
Saskatchewan	0.548	1.473	1.596	0.879	(3)
Manitoba	0.517	1.114	0.978	0.757	(7)
Ontario	1.202	0.311	1.264	0.880	(2)
New Brunswick	0.753	0.734	1.197	0.799	(4)
Nova Scotia	0.788	0.574	0.947	0.681	(8)
Prince Edward Island	0.653	1.375	0.606	0.634	(9)
Newfoundland	0.759	0.799	1.700	1.260	(1)
9 Provinces	0.768	0.597	1.322	0.837	
Ontario	0.551	0.849	1.205	0.796	(5)
Canada	0.722	0.672	1.256	0.819	

Note: In this table, "elasticity" refers to the growth of operating grants to universities relative to the growth of the economy. The table demonstrates that as the economy, stated in terms of Gross Domestic Product, expands or contracts, then operating grants to universities will expand or contract at a ratio greater or less than 1.00. That is, if provincial grants to universities are increasing at a faster rate than the GDP, this table will reflect elasticities greater than 1.00. If grants are increasing at a slower rate than the GDP, elasticities will be less than 1.00. If grants to universities actually decline, elasticities will usually equal a negative value.

Sources: Statistics Canada
Tripartite Committee on Interprovincial Comparisons.

FIGURE 14 *Growth in State & Provincial Grants per FTE Enrolment*

1977–78 to 1992–93 (Constant Dollars)

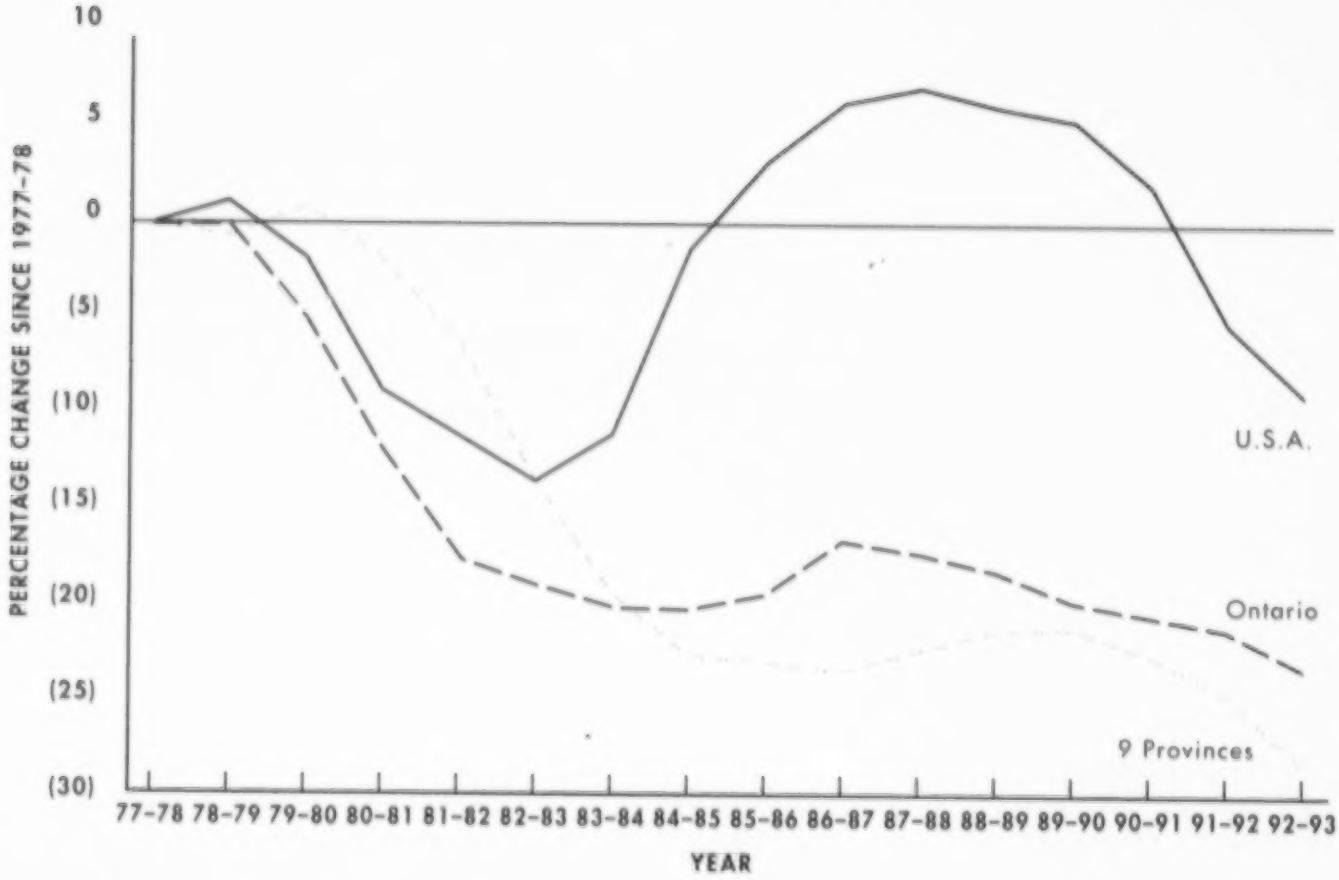

FIGURE 15 *Percentage Change in Appropriations per Student*

State and Provincial Funds, 1982–83 to 1992–93 (Constant Dollars)

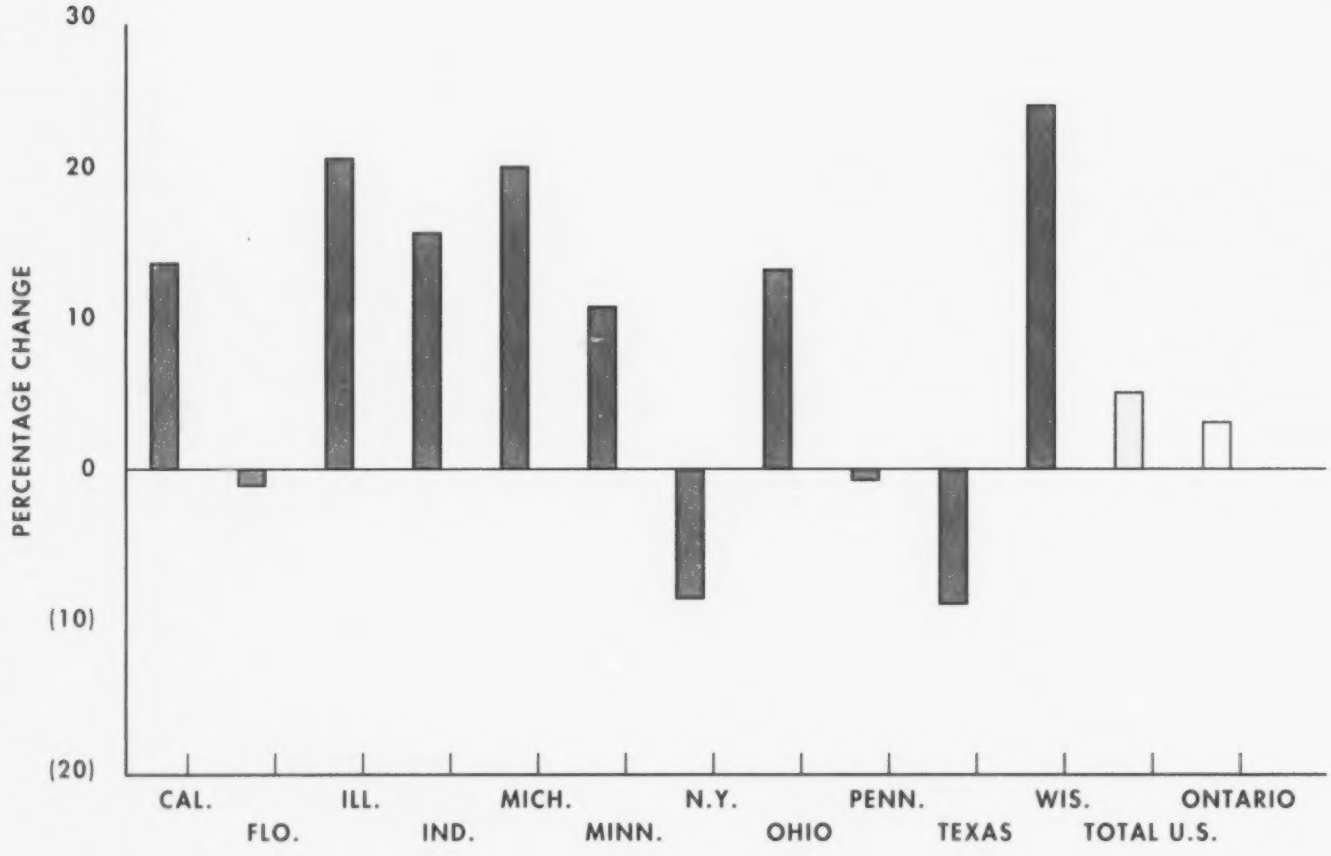

TABLE 15 *Two-Year Change in State Government Appropriations to Universities*

1991–92 to 1993–94

Rank	State	% Increase or Decrease
1	Georgia	+18
2	Tennessee	+18
3	Mississippi	+16
4	Texas	+13
5	North Carolina	+13
6	South Dakota	+13
7	New Mexico	+13
8	Iowa	+11
9	Utah	+11
10	Florida	+ 9
11	Hawaii	+ 9
12	Alabama	+ 9
13	Wisconsin	+ 8
14	Arkansas	+ 8
15	New Jersey	+ 7
16	New Hampshire	+ 7
17	Colorado	+ 7
18	Missouri	+ 6
19	Rhode Island	+ 6
20	Kansas	+ 6
21	Illinois	+ 6
22	Nebraska	+ 5
23	Maryland	+ 5
24	West Virginia	+ 5
25	Delaware	+ 4
26	Ohio	+ 4
27	Washington	+ 4
28	Arizona	+ 3
29	Idaho	+ 3
30	Pennsylvania	+ 2
31	Indiana	+ 2
32	New York	+ 2
33	Nevada	+ 1
34	Minnesota	+ 1
35	Michigan	+ 1
36	Wyoming	+ 1
37	Alaska	0
38	Maine	0
39	Oklahoma	- 1
40	North Dakota	- 1
41	Connecticut	- 1
42	Kentucky	- 1
43	Virginia	- 1
44	South Carolina	- 3
45	Vermont	- 3
46	Louisiana	- 4
47	Oregon	- 7
48	Montana	-10
49	California	-25
n/c	Massachusetts *	n/c
	Total U.S.	+ 2%

Source: The Chronicle of Higher Education

* The 1993-94 figures are not comparable with previous data.

FIGURE 16 *Revenue per Full-Time Enrolment at Ontario, U.S. Public and U.S. Private Doctoral Institutions*

1990–91

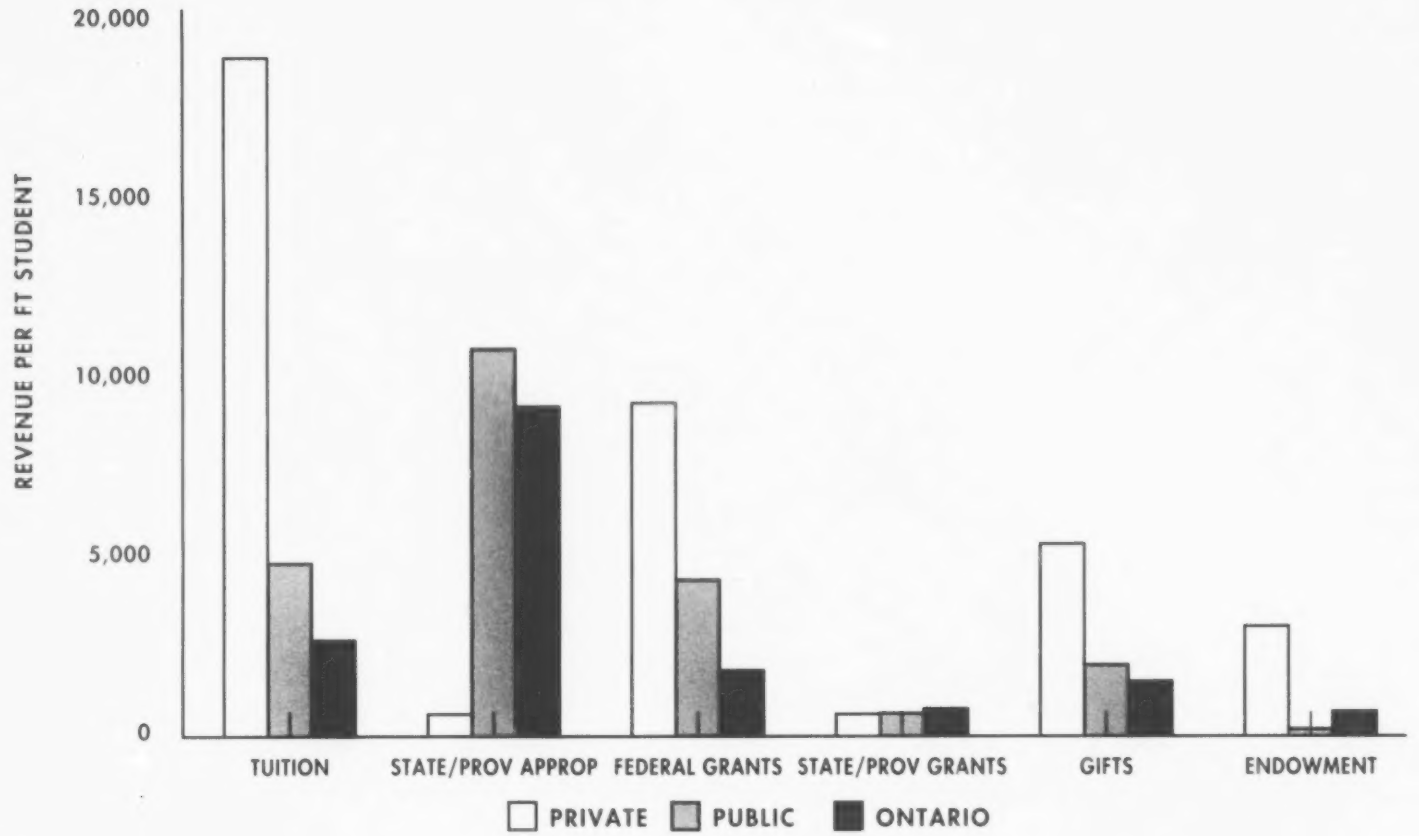

TABLE 16 *Revenue per Full-Time Enrolment at Research Doctoral Level Universities in Ontario and Eleven Major States, 1990-91 ($US)*

Institutions	Tuition and Fees	State Government Appropriations	Federal Government Grants and Contracts	State Government Grants and Contracts	Private Gifts Grants and Contracts	Endowment Income	TOTAL
PUBLIC							
California	3,759	15,873	8,045	924	2,611	0	31,213
Florida	2,760	13,982	3,189	1,467	2,701	1	24,100
Illinois	3,803	9,944	3,240	838	1,473	37	19,335
Indiana	4,793	8,174	2,383	303	899	104	16,656
Michigan	7,030	9,822	5,116	295	2,499	304	25,066
Minnesota	4,033	13,031	6,857	599	4,058	396	28,975
New York	4,324	16,434	4,775	1,381	2,369	253	29,537
Ohio	5,524	7,271	2,073	313	1,076	226	16,482
Pennsylvania	8,729	7,198	5,424	370	1,343	453	23,516
Texas	2,734	8,194	2,291	386	1,129	286	15,021
Wisconsin	5,460	11,725	6,697	111	2,910	239	27,142
TOTAL	4,658	10,596	4,252	602	1,856	189	22,152
PRIVATE							
California	21,382	0	18,875	151	7,313	4,073	51,794
Florida	19,170	836	6,429	2,070	3,022	784	32,311
Illinois	20,295	150	8,277	730	5,407	3,401	38,261
Indiana	15,595	0	3,281	239	4,263	2,410	25,788
Michigan	16,310	0	1,161	728	6,133	316	24,648
New York	19,828	646	7,915	646	5,941	2,655	37,631
Ohio	20,369	1,488	19,317	1,282	8,986	5,379	56,821
Pennsylvania	18,331	1,420	9,153	653	4,601	2,179	36,336
Texas	10,556	0	2,069	286	1,769	5,445	20,124
Wisconsin	12,051	0	1,058	78	616	497	14,300
TOTAL	18,691	532	9,032	619	5,213	2,979	37,067
ONTARIO							
Carleton	2,363	6,610	1,426	152	454	250	11,255
Guelph	2,304	9,393	2,023	2,852	1,195	553	18,320
McMaster	2,200	9,162	2,431	1,610	4,317	924	20,644
Ottawa	2,340	10,608	1,987	713	1,615	353	17,617
Queen's	2,235	9,771	2,935	858	1,877	924	18,601
Toronto	3,088	10,168	2,316	556	1,878	1,298	19,302
Waterloo	2,739	9,154	1,726	817	995	435	15,867
Western	2,529	8,260	1,382	345	1,409	626	14,551
Windsor	2,418	6,933	464	185	339	225	10,564
York	3,018	7,870	716	132	473	234	12,442
TOTAL	2,633	8,934	1,759	714	1,457	662	16,159

Sources: National Data Service for Higher Education
Council of Finance Officers - Universities of Ontario, Financial Report of Ontario Universities 1990-91

FIGURE 17 *Expenditure per Full-Time Enrolment at Ontario, U.S. Public and U.S. Private Doctoral Institutions*

1999–01

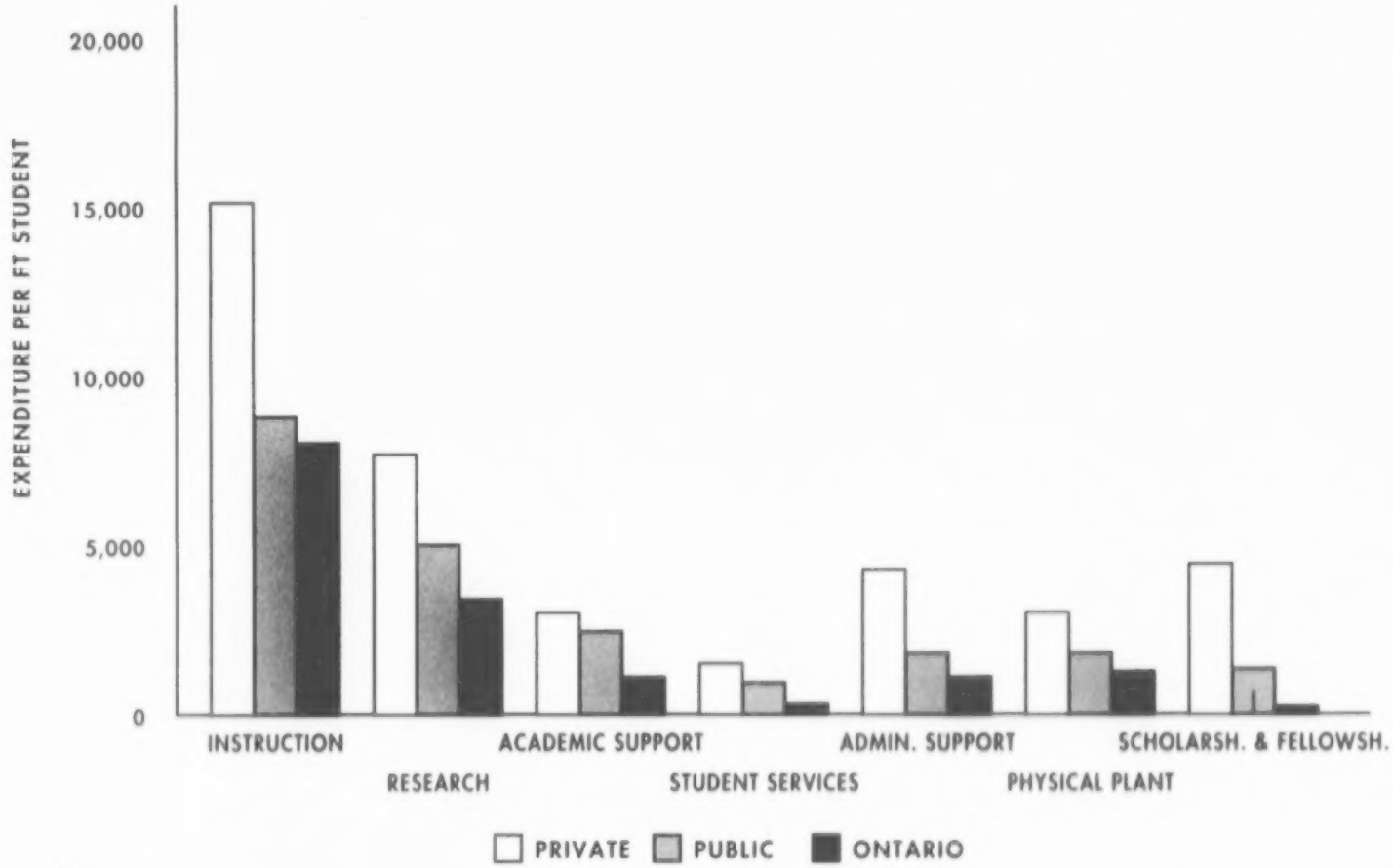

TABLE 17 *Expenditures per Full-Time Enrolment at Research Doctoral Level Universities in Ontario and Eleven Major States, 1990-91 ($US PPP)*

Institutions	Instruction	Research	Academic Support	Student Services	Administrative Support	Physical Plant	Scholarships and Fellowships	Total
PUBLIC INSTITUTIONS								
California	12,718	8,982	4,631	1,739	2,390	2,214	1,803	34,478
Florida	9,041	5,715	2,264	954	2,009	1,539	892	22,415
Illinois	7,182	3,697	2,369	1,019	1,181	1,971	1,524	18,943
Indiana	6,949	2,012	1,541	563	1,933	1,818	1,271	16,088
Michigan	9,609	5,479	2,187	1,083	1,870	2,007	1,937	24,172
Minnesota	10,890	9,136	3,230	1,049	2,040	2,351	1,201	29,898
New York	12,103	6,533	2,694	1,045	3,218	3,170	1,772	30,535
Ohio	7,914	1,937	1,726	808	1,332	1,240	1,180	16,137
Pennsylvania	8,645	5,623	2,892	936	1,979	1,898	1,561	23,534
Texas	5,918	3,314	1,196	383	1,693	1,497	1,161	15,162
Wisconsin	8,126	8,610	2,656	1,217	1,408	1,953	1,651	25,621
TOTAL PUBLIC	8,794	5,018	2,435	967	1,845	1,849	1,440	22,348
PRIVATE INSTITUTIONS								
California	18,162	15,068	5,017	1,888	5,907	3,914	5,961	55,918
Florida	13,917	5,073	2,117	1,390	2,806	1,797	3,826	30,925
Illinois	22,294	7,611	2,504	1,506	4,488	3,182	5,455	47,040
Indiana	9,868	2,830	2,053	1,193	3,151	2,014	4,034	25,144
Michigan	8,968	263	3,779	2,014	3,908	1,642	4,668	25,242
New York	15,028	6,714	2,563	1,503	4,595	3,367	4,200	37,971
Ohio	16,325	17,346	5,433	1,880	5,115	5,224	5,737	57,061
Pennsylvania	14,061	8,365	3,757	1,322	3,953	3,042	4,381	38,882
Texas	8,697	1,917	1,927	1,145	2,459	1,614	3,048	20,808
Wisconsin	6,555	454	2,283	1,018	2,252	1,233	2,061	15,856
TOTAL PRIVATE	15,123	7,661	3,054	1,485	4,290	3,058	4,471	39,141
ONTARIO								
Carleton	5,841	1,329	920	244	877	1,047	200	10,457
Guelph	8,279	5,642	868	509	1,504	1,383	169	18,355
McMaster	9,194	7,027	1,272	352	1,122	1,386	279	20,632
Ottawa	9,090	3,407	1,146	276	1,290	1,503	368	17,080
Queen's	8,804	5,058	1,230	443	1,124	1,283	638	18,580
Toronto	9,202	3,973	1,178	272	1,090	1,558	458	17,733
Waterloo	7,801	3,560	1,069	459	1,221	1,449	217	15,776
Western	7,743	2,619	1,082	436	1,007	957	325	14,169
Windsor	5,906	856	929	339	837	1,188	114	10,170
York	7,457	983	969	268	1,244	1,145	148	12,215
TOTAL ONTARIO	8,094	3,340	1,079	345	1,130	1,305	311	15,603

Sources: National Data Service for Higher Education
Council of Finance Officers - Universities of Ontario, Financial Report of Ontario Universities 1990-91.

TABLE 18 *Revenue per Full-Time Enrolment at the University of Toronto and Comparator Institutions in the United States*

1990–91

Institution	Tuition and Fees Per FT Student	State Government Appropriations Per FT Student	Federal Government Grants Per FT Student	State Government Grants and Contracts Per FT Student	Private Gifts, Grants and Contracts Per FT Student	Endowment Income Per FT Student	Total Per FT Student
University of Toronto	3,088	10,168	2,316	556	1,878	1,298	19,302
PUBLIC							
U California @ Los Angeles	4,185	16,182	8,032	559	2,759	0	31,718
U Illinois @ Urbana-Champaign	3,862	11,586	6,364	1,075	2,902	85	25,874
U Washington	5,547	12,482	13,379	615	2,962	204	35,188
U Wisconsin @ Madison	5,637	12,274	8,321	132	3,774	317	30,455
U Minnesota @ Minneapolis	4,033	13,031	6,857	599	4,058	396	28,975
Ohio State U - Main Campus	5,702	10,129	3,678	405	2,667	393	22,973
U Michigan @ Ann Arbor	10,550	9,488	9,559	204	4,064	712	34,576
U Florida	2,687	16,970	4,422	1,362	4,654	1	30,097
U.S. Institutions Average	5,279	12,680	7,373	595	3,456	273	29,656

TABLE 19 *Revenue per Full-Time Enrolment at Queen's University and Comparator Institutions in the United States*

1999–01

Institution	Tuition and Fees Per FT Student	State Government Appropriations Per FT Student	Federal Government Grants Per FT Student	State Government Grants and Contracts Per FT Student	Private Gifts, Grants and Contracts Per FT Student	Endowment Income Per FT Student	Total Per FT Student
Queen's University	2,235	9,771	2,935	858	1,877	924	18,601
PUBLIC							
U California @ Davis	3,402	18,003	5,024	1,567	1,922	0	29,919
U California @ Irvine	3,222	12,274	4,582	568	1,560	0	22,206
U Connecticut	5,485	11,693	1,629	655	888	208	20,558
U New Hampshire	7,883	4,513	3,710	271	1,424	222	18,023
U Rhode Island	6,456	7,602	4,206	363	473	0	19,100
U Utah	4,902	10,449	1,455	585	794	186	18,371
Washington State U	3,748	12,274	4,169	1,266	1,635	47	23,139
U Virginia - Main Campus	6,867	9,586	5,897	357	4,355	1,582	28,644
Colorado State U	5,745	6,227	4,402	326	664	0	17,365
U Maine @ Orono	4,229	9,368	2,679	670	918	133	17,997
U.S. Institutions Average	5,010	10,824	3,884	718	1,547	242	22,224
PRIVATE							
U Miami	18,898	1,309	9,327	2,565	3,806	1,141	37,047
Northwestern U	22,055	0	7,298	652	4,829	3,506	38,339
Princeton U	19,513	0	11,680	592	9,622	19,859	61,266
Yale U	17,960	0	20,958	1,376	9,814	10,611	60,719
Georgetown U	21,222	0	11,743	754	4,294	1,234	39,248
U.S. Institutions Average	20,024	303	11,916	1,253	6,095	5,987	45,579

TABLE 20 *Percentage of Universities' Total Income*

1991–92

	Provincial Government Grants		Total fees		Federal Government Grants		Other Operating Income		Total Income
	%	Rank	%	Rank	%	Rank	%	Rank	%
British Columbia	55.4	(8)	12.7	(7)	11.5	(2)	20.4	(4)	100.0
Alberta	61.8	(4)	11.2	(9)	8.5	(7)	18.6	(7)	100.0
Saskatchewan	56.8	(6)	14.0	(6)	9.4	(5)	19.7	(5)	100.0
Manitoba	58.1	(5)	14.3	(5)	8.5	(6)	19.1	(6)	100.0
Quebec	63.0	(3)	9.9	(10)	9.6	(3)	17.4	(8)	100.0
New Brunswick	56.0	(7)	16.9	(2)	6.3	(9)	20.8	(3)	100.0
Prince Edward Island	69.8	(1)	14.4	(4)	4.0	(10)	11.7	(10)	100.0
Nova Scotia	48.4	(10)	17.0	(1)	12.5	(1)	22.2	(2)	100.0
Newfoundland	66.4	(2)	11.9	(8)	9.6	(4)	12.1	(9)	100.0
9 Provinces	59.7	-	12.0	-	9.7	-	18.6	-	100.0
Ontario	55.1	(9)	14.8	(3)	7.6	(8)	22.5	(1)	100.0
Canada	57.9	-	13.1	-	8.9	-	20.1	-	100.0

Source: Canadian Association of University Business Officers, Financial Statistics of Universities and Colleges 1991-92.

TABLE 21 *Gifts, Donations, Contracts and Grants from the Private Sector, Ontario Universities and Colleges*

1983–84 to 1992–93 ($000)

	INCOME $ ACTUAL	INDEX $ ACTUAL	INCOME $ CONSTANT 1992–93	INDEX $ CONSTANT 1992-93
1983-84	138,542	100.0	198,449	100.0
1984-85	186,164	134.4	256,713	129.4
1985-86	179,887	129.8	238,277	120.1
1986-87	184,961	133.5	235,219	118.5
1987-88	210,079	151.6	256,059	129.0
1988-89	234,328	169.1	274,046	138.1
1989-90	263,346	190.1	292,612	147.4
1990-91	296,645	214.1	313,404	157.9
1991-92	339,947	245.4	345,386	174.0
1992-93	307,510	222.0	307,510	155.0

Source: COFO-UO, Financial Report of Ontario Universities, various years.

FIGURE 18 *Increase / Decrease in Grants and Tuition From 1977–78*

(Constant $ Per Student)

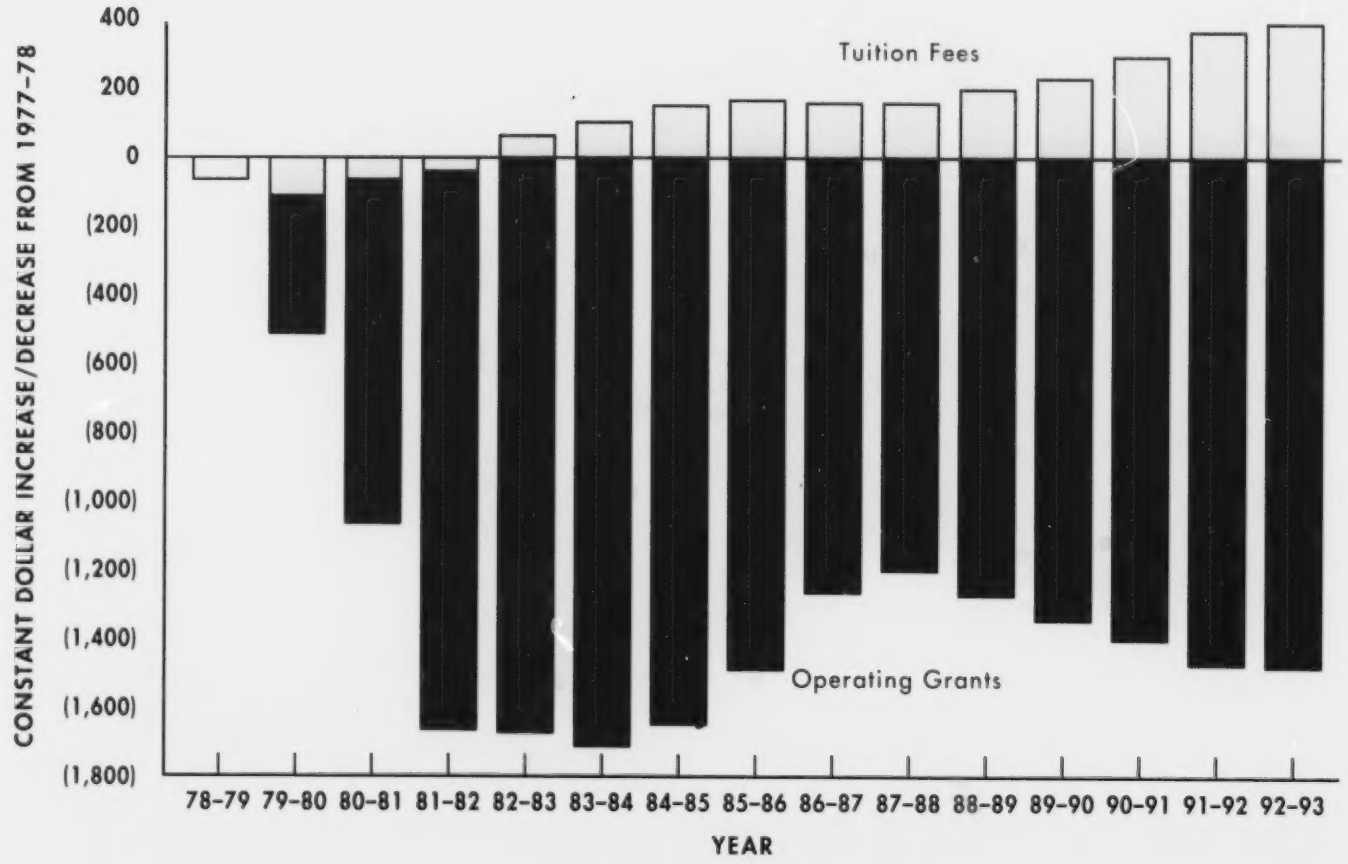

TABLE 22 *Undergraduate Arts Tuition Fees for Full-Time Students, 1983–84 and 1993–94*

Selected Canadian Institutions

Institution	1983–84	1993–94	% Change
Memorial University *Newfoundland*	$892	$2,000	124%
Dalhousie University *Nova Scotia*	$1,320	$2,655	101%
University of New Brunswick *New Brunswick*	$1,250	$2,470	98%
Université Laval *Quebec*	$450	$1,530	240%
McGill University *Quebec*	$570	$1,515	166%
Ontario Institutions	$1,101	$2,026	84%
University of Manitoba *Manitoba*	$705	$2,158	206%
University of Saskatchewan *Saskatchewan*	$870	$2,736	214%
University of Calgary *Alberta*	$762	$2,064	171%
University of British Columbia *British Columbia*	$882	$2,040	131%

Source: Statistics Canada. 81-219 Tuition and Living Accommodation Costs at Canadian Universities, selected years.

TABLE 23 *Tuition Fees at American Universities*

1993–94

	Tuition and Fees	Added Out-of-State Tuition
PUBLIC UNIVERSITIES		
U California @ Berkeley	$5,238	$10,163
U California @ Los Angeles	4,685	10,163
U Minnesota @ Minneapolis-St. Paul	4,311	7,376
U Michigan @ Ann Arbor	6,440	13,551
State U of New York @ Buffalo	4,063	5,148
PRIVATE UNIVERSITIES		
Harvard/Radcliffe	24,743	-
Stanford U	23,463	-
Princeton U	25,000	-
U Chicago	24,033	-

Note: Each American dollar is stated in terms of $1.32 Canadian dollars, the rate of exchange during September 1993.

Source: Annual Survey of Colleges 1993, The College Board.

FIGURE 19 *Average Tuition Fees (Excluding Incidental Fees) For Selected Universities, Ontario*

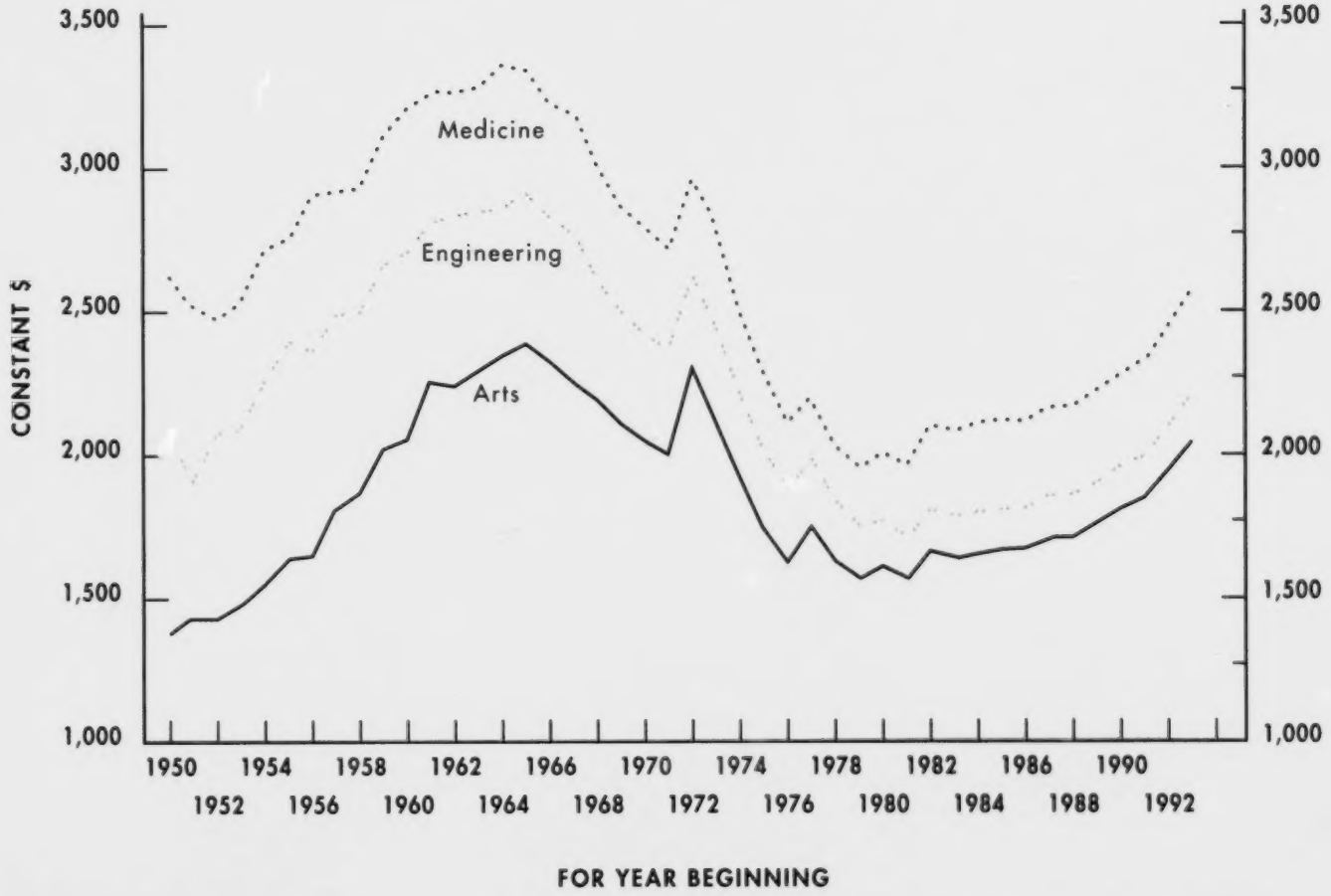

TABLE 24 *Tuition Fees (Excluding Incidental Fees) in Constant Dollars for Selected Universities, Ontario, 1950–1993.*

Academic Year Beginning	Arts	Medicine	Engineering	Consumer Price Index (1993=100)	Academic Year Beginning	Arts	Medicine	Engineering	Consumer Price Index (1993=100)
1950	1,344	2,594	2,043	14.6	*1972*	2,273	2,963	2,624	25.6
1951	1,404	2,492	1,872	16.2	*1973*	2,108	2,748	2,434	27.6
1952	1,397	2,447	2,046	16.5	*1974*	1,901	2,479	2,195	30.6
1953	1,444	2,500	2,059	16.4	*1975*	1,716	2,237	1,982	33.9
1954	1,511	2,705	2,238	16.5	*1976*	1,594	2,078	1,841	36.5
1955	1,603	2,739	2,374	16.5	*1977*	1,737	2,184	1,964	39.3
1956	1,621	2,894	2,332	16.7	*1978*	1,596	2,006	1,801	42.8
1957	1,782	2,902	2,468	17.3	*1979*	1,534	1,929	1,726	46.8
1958	1,838	2,911	2,487	17.7	*1980*	1,584	1,991	1,752	51.5
1959	1,994	3,092	2,647	18.0	*1981*	1,542	1,927	1,678	58.0
1960	2,027	3,195	2,687	18.2	*1982*	1,634	2,079	1,775	64.2
1961	2,228	3,246	2,802	18.3	*1983*	1,622	2,064	1,763	67.9
1962	2,204	3,245	2,826	18.5	*1984*	1,630	2,076	1,773	70.9
1963	2,258	3,269	2,840	18.9	*1985*	1,647	2,097	1,791	73.7
1964	2,325	3,345	2,846	19.2	*1986*	1,648	2,096	1,790	76.7
1965	2,359	3,330	2,913	19.7	*1987*	1,685	2,145	1,830	80.1
1966	2,298	3,216	2,813	20.4	*1988*	1,689	2,149	1,834	83.5
1967	2,221	3,177	2,754	21.2	*1989*	1,734	2,205	1,881	87.5
1968	2,181	2,988	2,595	22.0	*1990*	1,787	2,272	1,940	91.7
1969	2,086	2,858	2,482	23.0	*1991*	1,826	2,323	1,982	96.9
1970	2,024	2,767	2,403	23.8	*1992*	1,927	2,450	2,091	98.3
1971	1,967	2,688	2,334	24.5	*1993*	2,026	2,568	2,199	100.0

Source: Annual calendars of the Universities (1950 to 1988)
Statistics Canada. 81-219 Tuition and Living Accommodation Costs at Canadian Universities. (1988 to 1993)

FIGURE 20 *Tuition Fees at Ontario Universities as Percentages of Per Capita Income and Family Income*

1977–78 to 1991–92

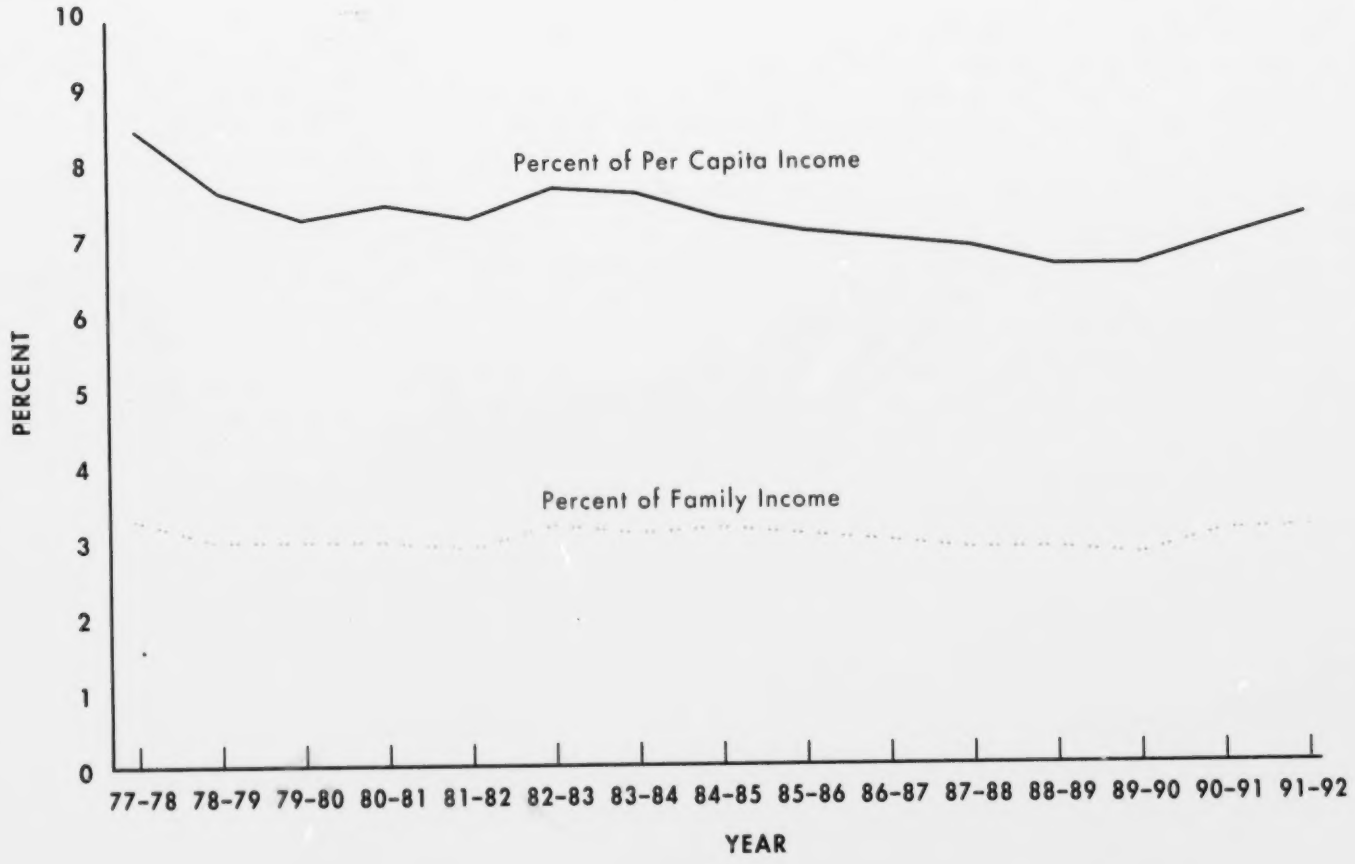

TABLE 25 *Tuition Fees at Ontario Universities as a Percentage of Per Capita Income and Family Income*

1977–78 to 1991–92

	Arts Tuition	Per Capita Income	Percent of Per Capita Income	Family Income	Percent of Family Income
1977-78	$683	$8,158.8	8.4%	$21,130	3.2%
1978-79	683	8,947.3	7.6%	23,261	2.9%
1979-80	718	9,907.4	7.2%	24,772	2.9%
1980-81	816	10,978.4	7.4%	28,270	2.9%
1981-82	895	12,479.2	7.2%	31,439	2.8%
1982-83	1,049	13,820.4	7.6%	33,716	3.1%
1983-84	1,102	14,785.5	7.5%	36,624	3.0%
1984-85	1,156	16,100.7	7.2%	37,721	3.1%
1985-86	1,214	17,235.3	7.0%	40,949	3.0%
1986-87	1,264	18,399.1	6.9%	44,098	2.9%
1987-88	1,350	19,856.7	6.8%	47,624	2.8%
1988-89	1,411	21,762.9	6.5%	51,303	2.8%
1989-90	1,517	23,383.0	6.5%	55,286	2.7%
1990-91	1,638	24,251.3	6.8%	55,293	3.0%
1991-92	1,769	24,484.9	7.2%	56,727	3.1%

Source: Annual calendars of the Universities (1950 to 1988)
Statistics Canada. 81-219 Tuition and Living Accommodation Costs at Canadian Universities (1988 to 1992)
Statistics Canada. 13-208 Family Incomes (1977 to 1991)
Statistics Canada. 91-002 Quarterly Demographic Statistics, 1993.
Statistics Canada. Personal Income

TABLE 26 *University and College Accumulated Operating Deficits*

1992–93

Institution	$000
Carleton University	8,766
University of Guelph	5,586
Ontario College of Art	491
Ontario Institute for Studies in Education	2,373
Queen's University	2,315
Ryerson Polytechnical Institute	16,566
University of Toronto	3,646
· St. Michael's College	5,444
· Victoria College	2,355
Trent University	3,860
University of Waterloo	6,353
· Renison College	620
· St. Paul's United College	160
University of Western Ontario	8,979
· King's College & St. Peter's Seminary	1,350
Wilfrid Laurier University	698

Note: COFO-UO Financial Report of Ontario Universities 1992-93

FIGURE 21 *Costs of Sponsored Research and Operating Base*

Ontario Universities, 1977–78 to 1992–93 (1977–78 = 100.0)

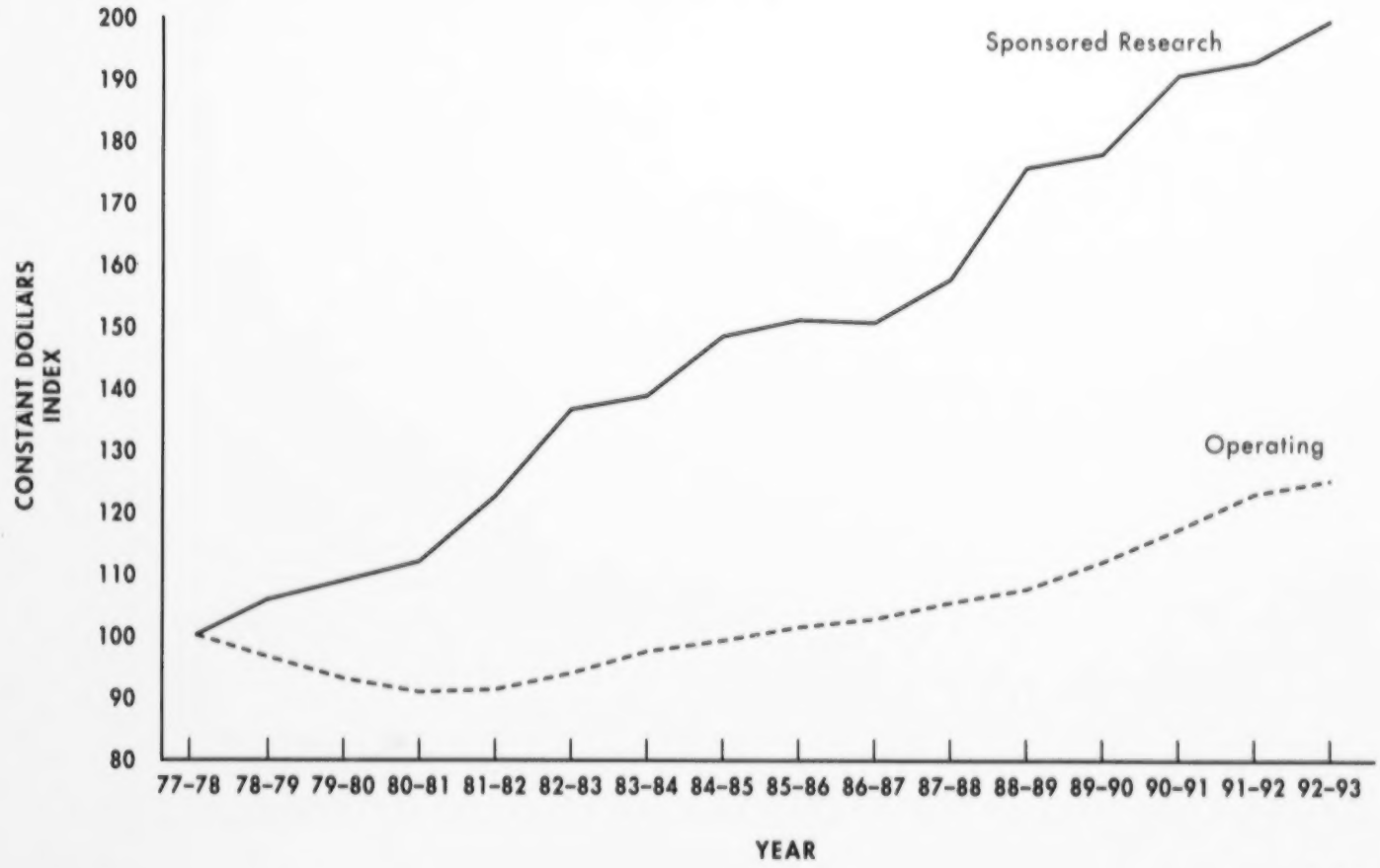

TABLE 27 *Costs of Sponsored Research and the Operating Base*

1977–78 to 1992–93

	Sponsored Research Expenses		Operating Expenses	
	Constant Dollars (1992–93) $000	Percentage Growth from 1977–78	Constant Dollars (1992–93) $000	Percentage Growth from 1977–78
1977-78	307,463		2,125,183	
1978-79	324,086	5.4	2,045,390	-3.8
1979-80	333,349	8.4	1,977,593	-6.9
1980-81	345,513	12.4	1,929,369	-9.2
1981-82	378,205	23.0	1,932,126	-9.1
1982-83	418,103	36.0	1,998,222	-6.0
1983-84	425,528	38.4	2,068,615	-2.7
1984-85	454,776	47.9	2,096,195	-1.4
1985-86	461,517	50.1	2,148,016	1.1
1986-87	458,405	49.1	2,178,524	2.5
1987-88	481,118	56.5	2,223,416	4.6
1988-89	536,723	74.6	2,283,809	7.5
1989-90	542,832	76.6	2,363,604	11.2
1990-91	581,305	89.1	2,480,282	16.7
1991-92	589,621	91.8	2,598,425	22.3
1992-93	610,424	98.5	2,650,614	24.7

Source: COFO-UO, Financial Report of Ontario Universities, various years.

FIGURE 22 *Ontario Universities' Share of Federal Grants and Contracts*

1981–82 vs 1991–92

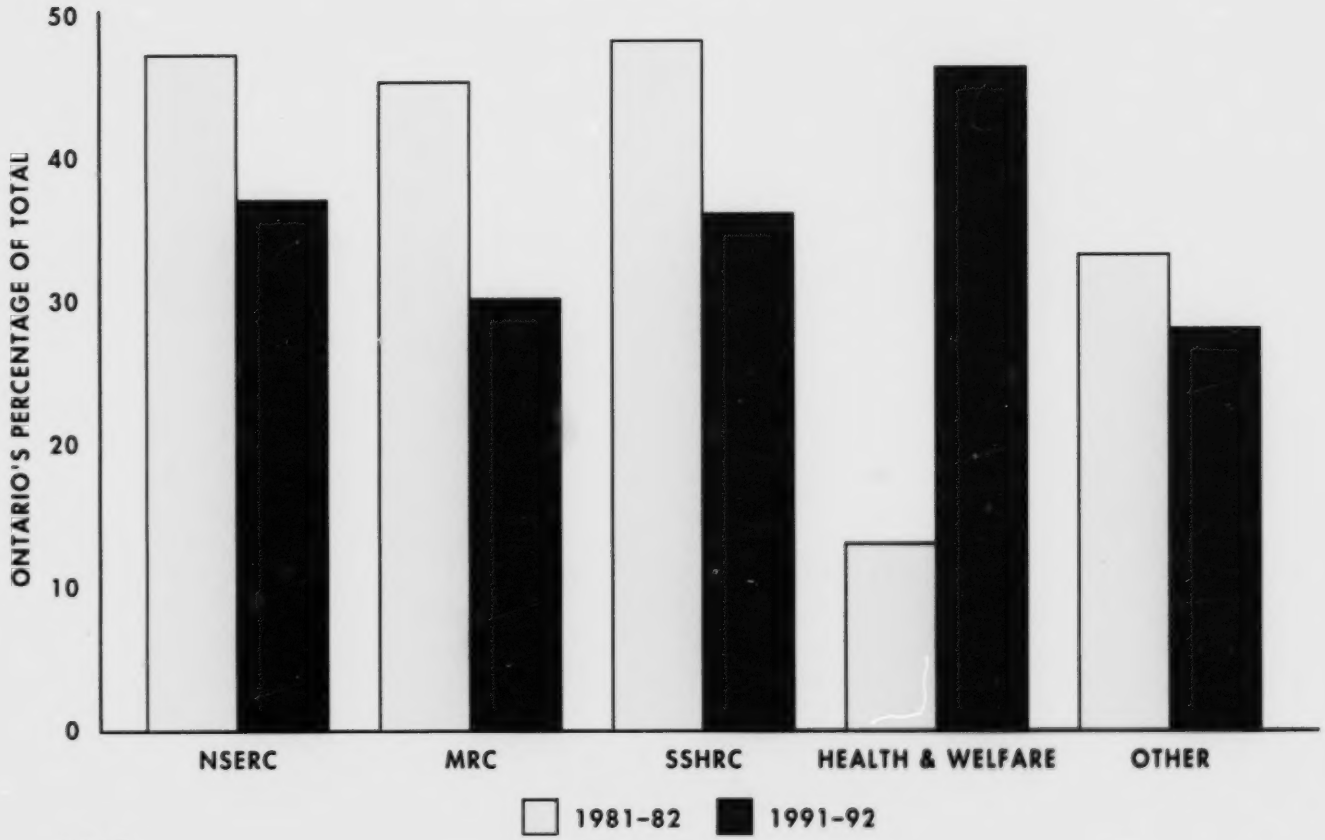

FIGURE 23 *Ontario Government & Universities Contributory Benefits as a Percentage of Salaries*

1977–78 to 1992–93

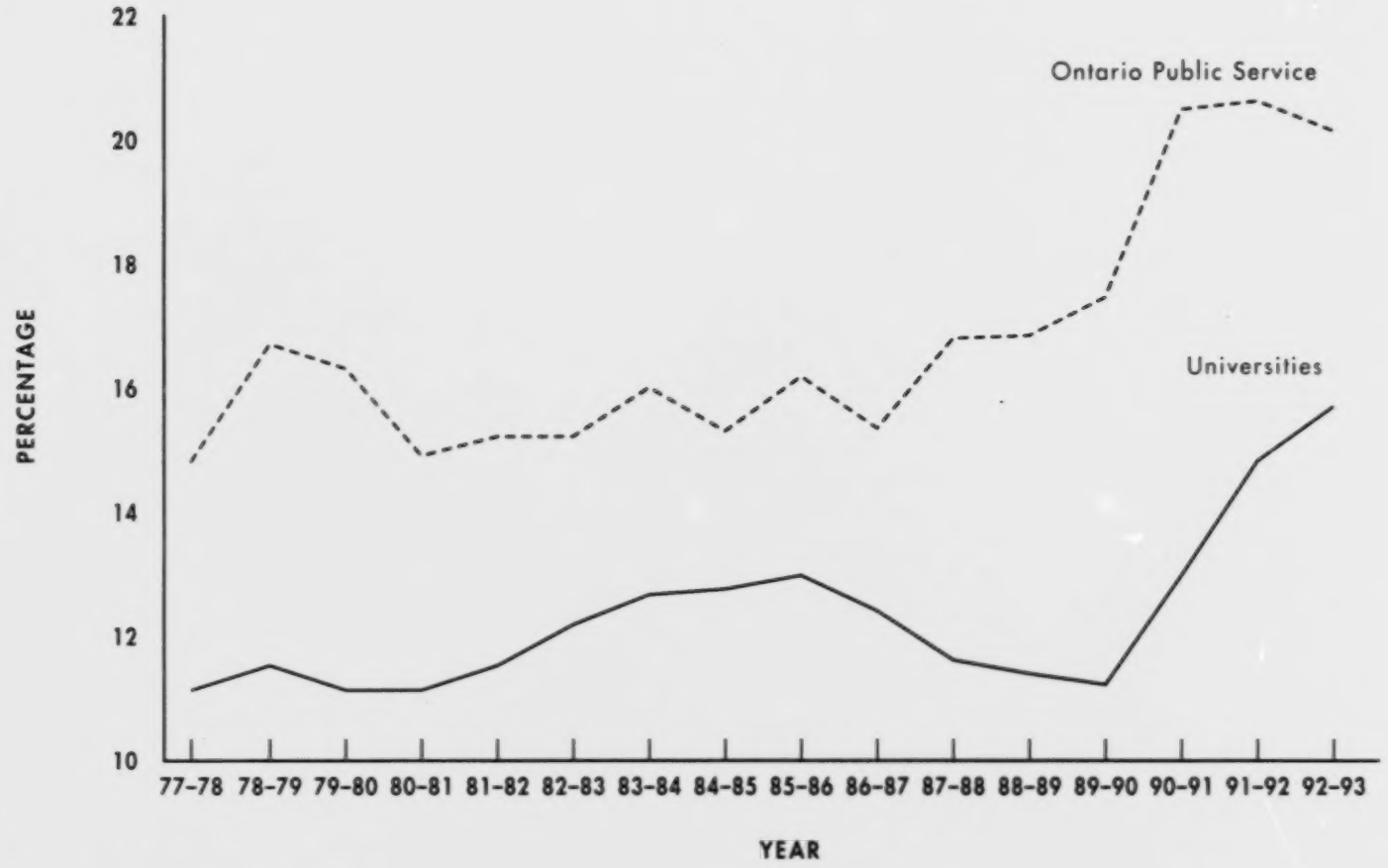

TABLE 28 *Comparison of Benefit Costs 1977–78 to 1992–93*

($000 Constant 1992–93 Dollars) (Excluding OCA, Algoma, Nipissing, Hearst)

	1977 -78	1978 -79	1979 -80	1980 -81	1981 -82	1982 -83	1983 -84	1984 -85	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90	1990 -91	1991 -92	1992 -93
STATUTORY BENEFITS																
O.H.I.P.	14,247	14,925	13,272	11,371	11,592	13,138	13,011	13,327	13,076	12,870	12,449	12,020	8,165	0	0	0
Canada Pension	14,455	14,117	13,815	13,653	13,582	14,351	14,653	15,331	18,438	17,695	18,114	19,200	20,936	22,521	24,384	25,414
Workers' Compensation	2,320	2,071	2,022	1,900	2,268	2,590	2,697	3,150	3,688	4,123	4,692	4,939	5,036	5,544	5,891	6,639
Unemployment Insurance	17,744	16,166	13,471	15,557	18,721	21,613	27,673	28,973	30,479	31,263	31,980	30,978	30,140	34,359	44,224	48,694
Employer Health Tax	0	0	0	0	0	0	0	0	0	0	0	0	11,290	33,578	35,745	36,084
Total Statutory Benefits	48,766	47,281	42,580	42,480	46,162	51,692	58,034	60,781	65,681	65,951	54,786	67,138	75,566	96,002	110,244	116,831
NON-STATUTORY BENEFITS																
Pension																
- Current Service	88,117	87,329	85,266	81,661	83,083	88,135	90,972	90,845	91,321	89,899	97,788	76,775	77,078	79,595	97,500	106,418
- Experience Deficiency	3,703	4,063	1,015	338	641	635	461	426	(253)	(249)	(240)	(740)	0	0	0	140
- Past Service Liability	8,483	7,957	4,988	1,602	242	799	1,003	1,267	0	116	188	(1,230)	322	347	153	309
Group Life Insurance	9,391	8,475	8,063	7,295	6,419	6,880	7,091	6,664	6,950	6,874	7,263	7,613	8,273	8,827	7,924	9,341
Long Term Disability	4,418	4,588	4,511	5,609	5,333	5,971	7,041	6,850	6,772	6,831	7,042	7,540	7,157	7,816	8,342	9,061
Dental Insurance	2,991	4,745	4,712	5,495	7,146	8,100	8,413	9,173	10,483	11,486	12,350	12,794	14,643	14,914	17,226	16,872
Extended Health Care	2,641	2,304	2,197	3,067	3,416	4,285	4,705	5,535	6,856	7,404	8,003	9,255	10,634	12,735	14,662	16,140
Tuition Remission	1,172	2,151	3,475	3,516	4,332	4,410	4,613	5,629	5,739	5,633	5,176	5,719	5,918	6,806	7,104	7,031
Other	1,187	1,061	1,268	1,211	1,600	1,513	1,283	598	1,670	(4,120)	(23,544)	(357)	1,083	300	4,804	4,521
Total Non-statutory Benefits	122,106	122,675	115,495	109,794	112,212	120,727	125,582	126,987	129,538	123,874	114,026	117,369	125,110	131,339	157,716	169,833
Total Benefits	170,872	169,956	158,074	152,273	158,374	172,419	183,616	187,768	195,219	189,825	168,812	184,507	200,676	227,341	267,960	286,664

TABLE 29 *Percentage Distribution of Total Benefit Costs, 1977–78 to 1992–93*

($000 Constant 1992–93 Dollars) (Excluding OCA, Algoma, Nipissing, Hearst)

	1977 -78	1978 -79	1979 -80	1980 -81	1981 -82	1982 -83	1983 -84	1984 -85	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90	1990 -91	1991 -92	1992 -93
STATUTORY BENEFITS																
O.H.I.P.	8.3	8.8	8.4	7.5	7.3	7.6	7.1	7.1	6.7	6.8	7.4	6.5	4.1	0.0	0.0	0.0
Canada Pension	8.5	8.3	8.7	9.0	8.6	8.3	8.0	8.2	9.4	9.3	10.7	10.4	10.4	9.9	9.1	8.9
Workers' Compensation	1.4	1.2	1.3	1.2	1.4	1.5	1.5	1.7	1.9	2.2	2.8	2.7	2.5	2.4	2.2	2.3
Unemployment Insurance	10.4	9.5	8.5	10.2	11.8	12.5	15.1	15.4	15.6	16.5	18.9	16.8	15.0	15.1	16.5	17.0
Employer Health Tax	-	-	-	-	-	-	-	-	-	-	-	-	5.6	14.8	13.3	12.6
Total Statutory Benefits	28.5	27.8	26.9	27.9	29.1	30.0	31.6	32.4	33.6	34.7	32.5	36.4	37.7	42.2	41.1	40.8
NON-STATUTORY BENEFITS																
Pension																
- Current Service	51.6	51.4	53.9	53.6	52.5	51.1	49.5	48.4	46.8	47.4	57.9	41.6	38.4	35.0	36.4	37.1
- Experience Deficiency	2.2	2.4	0.6	0.2	0.4	0.4	0.3	0.2	-0.1	-0.1	-0.1	-0.4	0.0	0.0	0.0	0.0
- Past Service Liability	5.0	4.7	3.2	1.1	0.2	0.5	0.5	0.7	0.0	0.1	0.1	-0.7	0.2	0.2	0.1	0.1
Group Life Insurance	5.5	5.0	5.1	4.8	4.1	4.0	3.9	3.5	3.6	3.6	4.3	4.1	4.1	3.9	3.0	3.3
Long Term Disability	2.6	2.7	2.9	3.7	3.4	3.5	3.8	3.6	3.5	3.6	4.2	4.1	3.6	3.4	3.1	3.2
Dental Insurance	1.8	2.8	3.0	3.6	4.5	4.7	4.6	4.9	5.4	6.1	7.3	6.9	7.3	6.6	6.4	5.9
Extended Health Care	1.5	1.4	1.4	2.0	2.2	2.5	2.6	2.9	3.5	3.9	4.7	5.0	5.3	5.6	5.5	5.6
Tuition Remission	0.7	1.3	2.2	2.3	2.7	2.6	2.5	3.0	2.9	3.0	3.1	3.1	2.9	3.0	2.7	2.5
Other	0.7	0.6	0.8	0.8	1.0	0.9	0.7	0.3	0.9	-2.2	-13.9	-0.2	0.5	0.1	1.8	1.6
Total Non-statutory Benefits	71.5	72.2	73.1	72.1	70.9	70.0	68.4	67.6	66.4	65.3	67.5	63.6	62.3	57.8	58.9	59.2
Total Benefits	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 30 *Salaries and Wages, Ontario Universities, 1977–78 to 1992–93*

(1992–93 $ Constant)

	Academic Ranks		Other Instruction & Research		Non-Academic Staff		Total Salaries & Wages	
	Constant Dollars ($000)	Constant Dollars Per FTE Enrolment	Constant Dollars ($000)	Constant Dollars Per FTE Enrolment	Constant Dollars ($000)	Constant Dollars Per FTE Enrolment	Constant Dollars ($000)	Constant Dollars Per FTE Enrolment
1977-78	833,264	100.0	93,609	100.0	613,764	100.0	1,540,637	100.0
1978-79	804,046	96.3	86,930	92.7	588,159	95.7	1,479,135	95.9
1979-80	776,347	92.4	85,028	90.1	553,575	89.4	1,414,949	91.1
1980-81	758,285	87.2	84,317	86.3	535,634	83.7	1,378,236	85.7
1981-82	757,672	83.1	81,862	79.9	536,947	80.0	1,376,481	81.7
1982-83	784,903	81.6	81,876	75.7	554,587	78.2	1,421,366	79.9
1983-84	797,433	80.3	82,096	73.6	579,801	79.2	1,459,329	79.4
1984-85	805,023	80.6	82,758	73.8	588,734	80.0	1,476,515	80.0
1985-86	818,353	82.6	85,401	76.7	607,397	83.2	1,511,150	82.5
1986-87	837,318	84.2	85,926	76.9	613,564	83.7	1,536,809	83.6
1987-88	861,604	84.2	87,513	76.2	630,837	83.7	1,579,953	83.6
1988-89	888,718	83.7	94,060	78.9	653,523	83.6	1,636,301	83.4
1989-90	910,106	83.0	100,508	81.6	682,818	84.5	1,693,433	83.5
1990-91	938,273	82.3	107,516	83.9	713,103	84.9	1,758,892	83.4
1991-92	969,868	81.8	137,025	102.9	716,454	82.0	1,823,346	83.2
1992-93	980,022	81.5	132,391	98.1	737,846	83.4	1,850,259	83.3

Source: COFO-UO, Financial Report of Ontario Universities, various years

FIGURE 24 *Index of University Expenditures on Library Acquisitions*

1977–78 to 1992–93

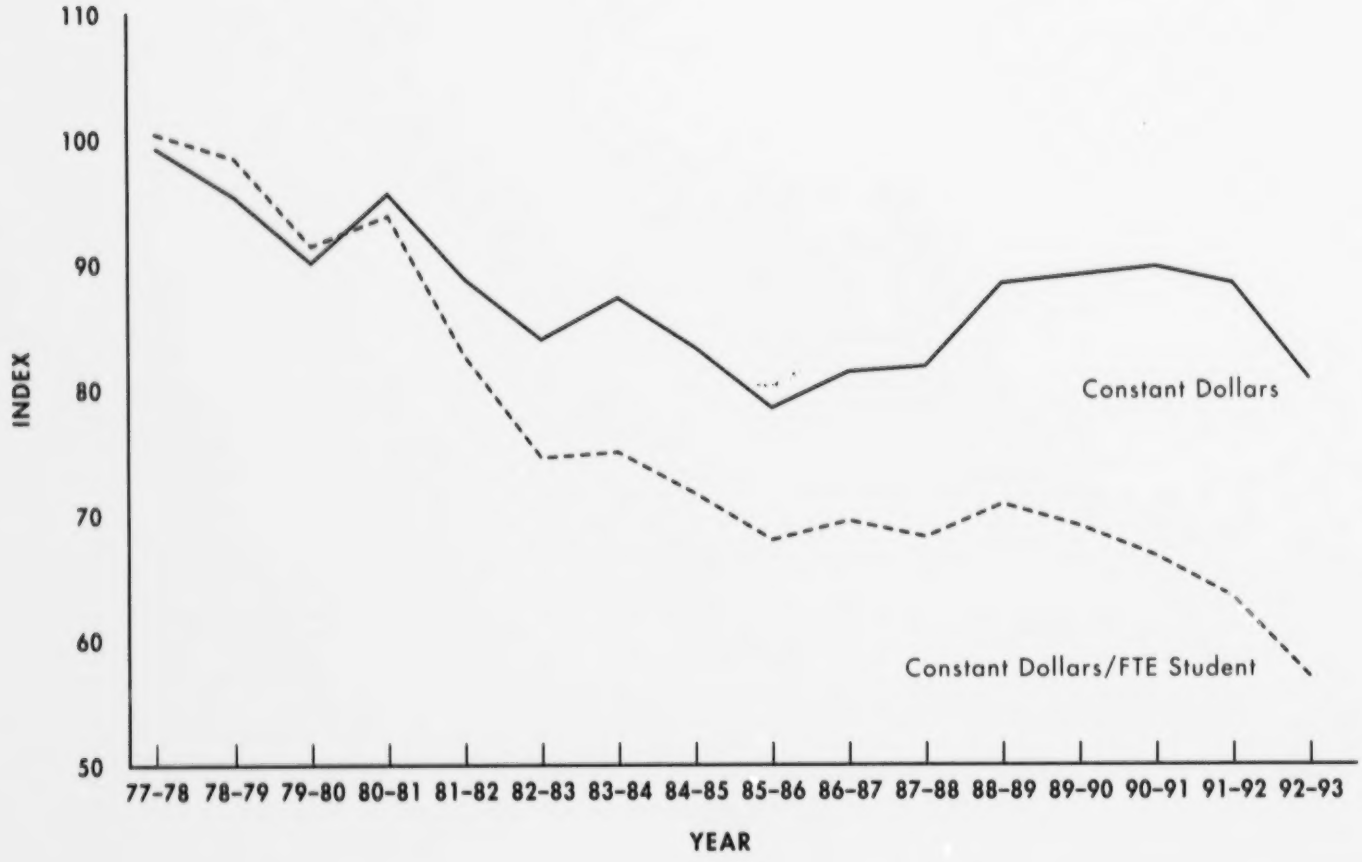

TABLE 31 *Expenditures on Library Acquisitions*

Ontario Universities, 1977–78 to 1992–93

	Acquisitions as % of Total Operating Expenses	Constant Dollars	Constant Dollars per FTE	Cost Index
1977-78	2.0	100.0	100.0	100.0
1978-79	2.1	96.0	98.3	115.4
1979-80	2.2	89.9	91.4	136.5
1980-81	2.3	95.9	94.2	148.0
1981-82	2.2	89.3	83.6	168.8
1982-83	2.1	83.9	74.5	198.1
1983-84	2.2	87.4	75.2	214.3
1984-85	2.2	84.1	72.0	236.7
1985-86	2.2	78.6	67.8	263.8
1986-87	2.2	81.2	69.8	278.5
1987-88	2.2	81.7	68.3	293.3
1988-89	2.3	88.0	70.8	295.3
1989-90	2.2	88.8	69.2	309.9
1990-91	2.1	89.4	67.0	326.9
1991-92	2.1	88.4	63.7	355.4
1992-93	2.1	80.3	57.1	414.7

Source: COFO-UO Financial Report of Ontario Universities, various years.
Bowker (U.S.) Hardcover Book and Periodical.
Price Indices converted for Canadian dollar fluctuations.

FIGURE 25 *Capital Funding for Universities, Ryerson & OCA in Actual & Constant 93–94 Dollars*

1964–65 to 1993–94

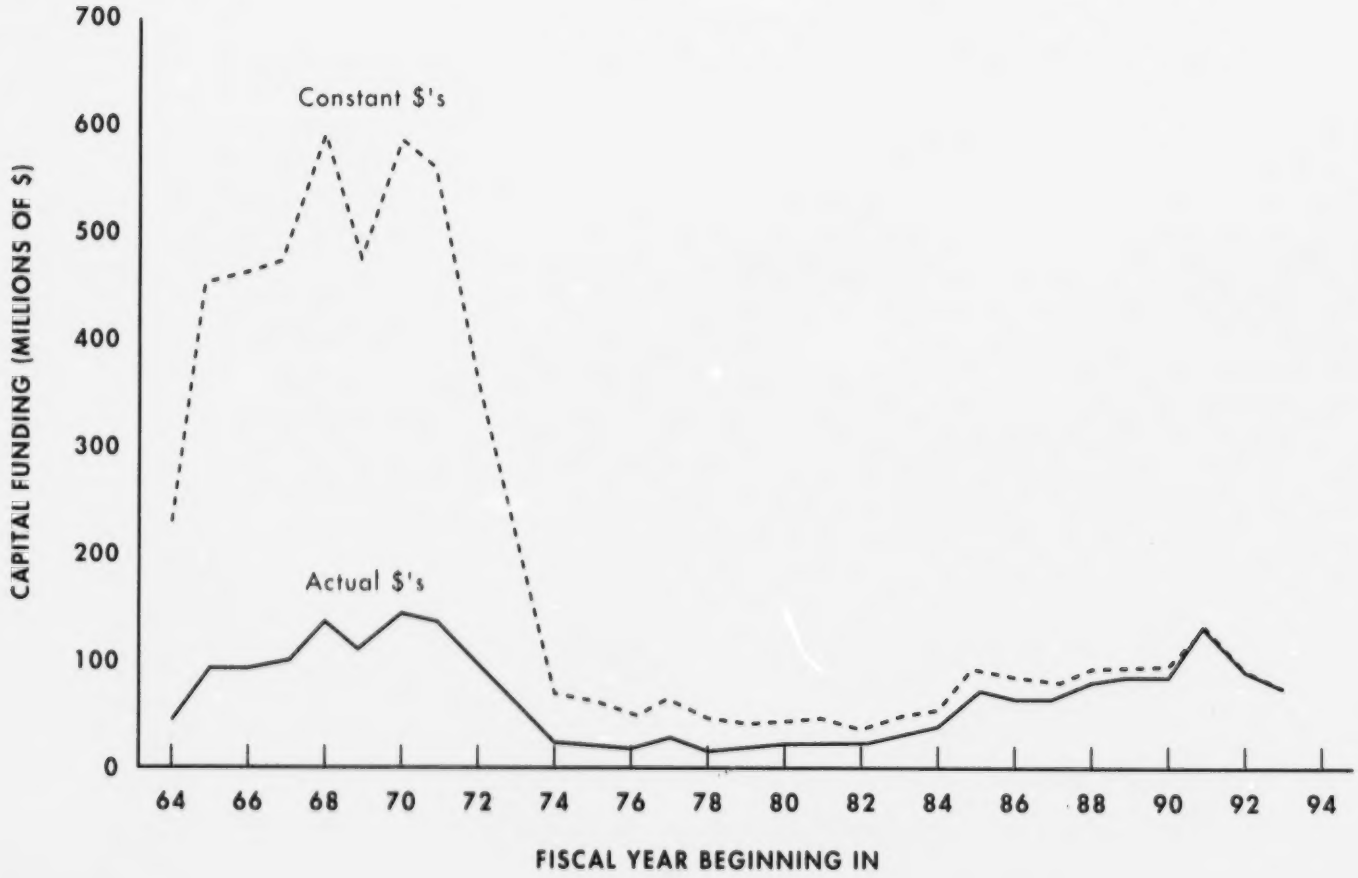

TABLE 32 *Capital Funding for Universities, Ryerson, OCA*

1964–65 to 1993–94

	Capital Funding ($000)	Constant 1993–94 ($000)
1964-65	45,600.0	236,046.9
1965-66	89,239.0	448,612.8
1966-67	93,105.0	451,920.9
1967-68	99,995.0	466,560.5
1968-69	132,974.0	593,903.8
1969-70	109,253.0	470,339.7
1970-71	139,805.0	587,570.4
1971-72	136,047.0	550,677.6
1972-73	98,712.0	380,033.0
1973-74	54,492.0	192,801.1
1974-75	21,642.0	68,682.6
1975-76	20,593.2	59,431.1
1976-77	17,618.7	47,627.8
1977-78	26,089.6	64,922.0
1978-79	17,498.4	39,897.2
1979-80	17,740.5	37,033.5
1980-81	20,387.0	38,302.3
1981-82	22,891.7	38,331.6
1982-83	19,620.3	30,030.8
1983-84	28,960.0	42,175.2
1984-85	34,742.6	48,697.3
1985-86	67,225.8	90,515.5
1986-87	61,217.2	79,103.9
1987-88	60,653.0	75,143.7
1988-89	72,700.0	86,438.4
1989-90	77,700.0	87,733.4
1990-91	77,700.0	83,476.1
1991-92	124,557.4	128,670.0
1992-93	83,967.0	85,373.4
1993-94 (e)	64,875.0	64,875.0

Source: Ministry of Education and Training
Expenditure Estimates 1993-94

TABLE 33 *Buildings Land and Site Services, Total Expenses per FTE Student by Province*

1977–78 to 1991–92 ($000 Constant 1991–92 Dollars)

Province	1977 -78	1978 -79	1979 -80	1980 -81	1981 -82	1982 -83	1983 -84	1984 -85	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90	1990 -91	1991 -92	Total	Rank
British Columbia	1,327	1,258	1,239	1,868	1,473	927	495	965	1,076	461	377	1,202	898	983	2,085	16,636	(4)
Alberta	666	974	1,686	1,575	1,776	1,906	1,802	1,183	1,329	2,268	1,234	603	557	456	478	18,491	(2)
Saskatchewan	1,126	1,467	1,943	1,690	660	341	511	710	778	1,139	782	1,005	2,746	1,430	371	16,700	(3)
Manitoba	193	155	634	118	361	230	495	721	399	518	275	301	165	245	376	5,186	(9)
Quebec	1,403	1,572	683	459	239	321	213	321	242	262	213	366	504	635	759	8,192	(6)
New Brunswick	25	227	519	60	35	233	453	235	540	535	853	523	78	39	351	4,709	(10)
Prince Edward Island	87	61	1,147	329	0	284	111	236	972	20,612	1,585	1,247	2,310	499	86	29,565	(1)
Nova Scotia	545	1,469	1,484	1,257	819	227	30	114	340	507	511	570	179	50	37	8,140	(7)
Newfoundland	226	246	175	187	146	328	617	196	579	504	1,393	1,617	628	544	938	8,323	(5)
9-Provinces	988	1,208	1,003	878	675	601	524	555	581	809	530	614	655	601	766	10,986	
Ontario	475	257	198	366	219	177	134	152	314	431	330	378	546	746	732	5,457	(8)
Canada	773	816	674	668	488	429	369	396	477	664	452	521	612	658	752	8,752	

Source: Statistics Canada
Canadian Association of University Business Officers

FIGURE 26 *Capital Formation and Capital Stock*

Buildings

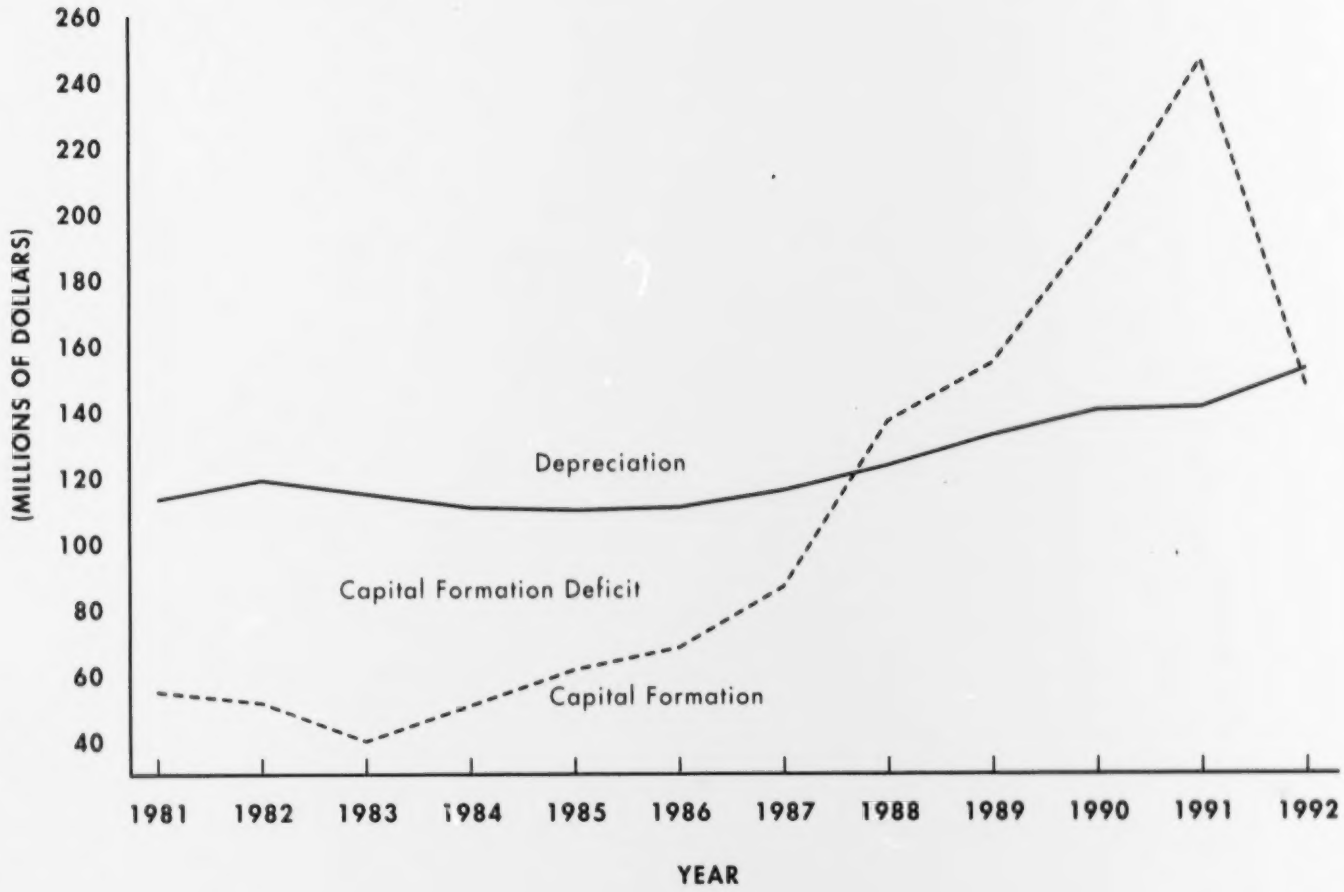

TABLE 34 *Capital Formation and Capital Stock*

Ontario Universities, Buildings ($ Millions Current Dollars)

Years	End-Year Net Stock	Gross Fixed Capital Formation	Geometric Depreciation*	Net Fixed Capital Formation**
1981	1,677.9	55.9	113.5	(57.6)
1982	1,743.0	51.5	119.3	(67.8)
1983	1,664.7	39.0	115.5	(76.5)
1984	1,576.7	49.7	110.1	(60.4)
1985	1,551.1	61.7	108.9	(47.2)
1986	1,567.6	67.7	110.7	(43.0)
1987	1,626.6	87.7	115.0	(27.3)
1988	1,748.0	137.4	122.4	15.0
1989	1,899.2	153.4	132.8	20.6
1990	2,028.5	198.9	140.3	58.6
*1991***	2,076.6	247.5	141.1	106.4
*1992****	2,175.6	143.1	151.6	(8.5)

* Capital Consumption Allowances

** Net Fixed Capital Formation equals Gross Fixed Capital Formation minus Depreciation.

*** Estimates for the two most recent years are based respectively on preliminary and expected investment expenditures.

Source: Statistics Canada.

Appendix

APPENDIX

UPDATE OF THE

ONTARIO UNIVERSITY NON-SALARY PRICE INDEX

The Ontario University Non-Salary Price Index was developed in 1978 to provide "a more sensitive tool to assist in measuring the likely impact of inflation on non-salary expenditure, and a more accurate measure of the extent of inflationary erosion between any two years".* The OUNSPI measures both component and global price changes for university non-salary expenditure. The components include library acquisitions, equipment and furniture, operational supplies and expenses, utilities, renovations, alterations, and major repairs, externally contracted services, travel, insurance and space rental. In 1984, and again in 1993, the OUNSPI was revised to take account of altered patterns of expenditure.

Figure A-1 compares the growth of the OUNSPI with that of the Consumer Price Index for Canada between 1977-78 and 1993-94.

Figure A-2 identifies the sources of information for the various components employed in OUNSPI and indicates the index weights employed for each component in the calculation of the overall, non-salary price index.

Table A-1 compares the growth of the OUNSPI with that of the CPI for Canada between 1977-78 and 1993-94.

Table A-2 provides information on the annual percentage variations of the components of the OUNSPI to 1991-92.

Table A-3 provides an update of the index values for each component of the OUNSPI based on 1980-81 being equal to 100.00.

* Council of Ontario Universities, *Ontario University Non-Salary Price Index*, February 1978.

FIGURE A-1 *OUNSPI and CPI*

1977–78 to 1993–94

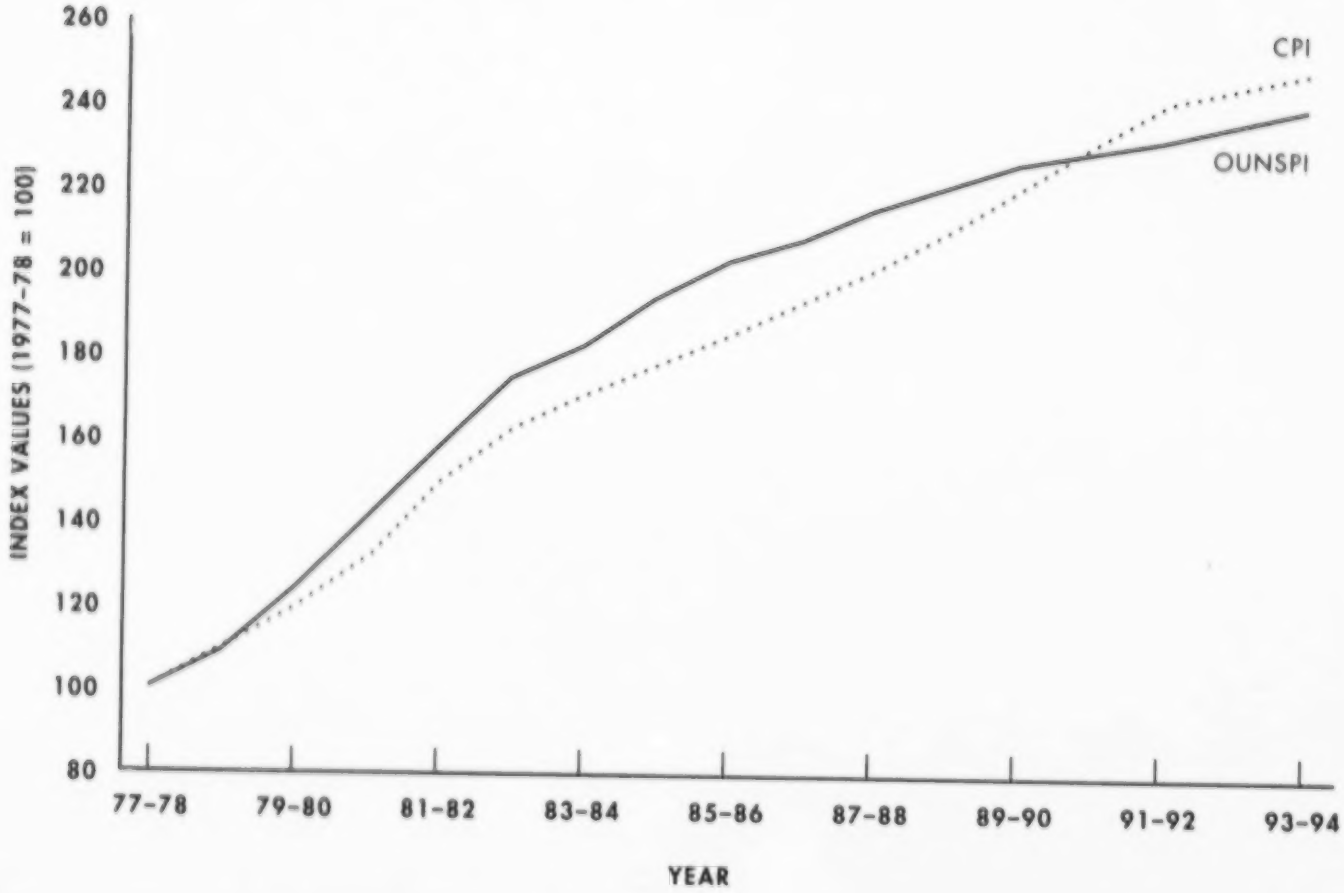

FIGURE A-2 *Source and Weighting Pattern of Component Indices*

Component	Index Weights (1984)	Index Weights (1993)	Source
Books	7	7	Bowker (U.S.) Hardcover Book Price Index, converted for Canadian dollar fluctuations.
Periodicals	7	7	Bowker (U.S.) Periodical Price Index, converted for Canadian dollar fluctuations.
Equipment	10	10	U.S. Department of commerce. Survey of Current Business. Price Index for machinery and equipment, converted for Canadian dollar fluctuations.
Computer Equipment	10	10	Research Associates of Washington. Higher Education Prices and Price Indexes: 1986 Update. Date processing hardware. Converted for Canadian dollar fluctuations. Statistics Canada Industrial Product Price Index – Electronic Computing and Peripheral Equipment Industry.
Furniture	2	1	Statistics Canada Industrial Product Price Index – Office Furniture Industries.
Stationery and Paper	8	11	Statistics Canada Industrial Product Price Index – Paper and Allied Product Industries.
Printing Materials	7	7	Statistics Canada Industrial Product Price Index – Fine Papers.
Tools and Apparatus	8	5	Statistics Canada Industrial Product Price Index – Hardware, Tool and Cutlery Industries.
Chemicals	4	4	Statistics Canada Industrial Product Price Index – Chemical & Chemical Products Industries.
Postage	3	4	Statistics Canada Industrial Product Price Index – Postal Services.
Long Distance	2	2	Statistics Canada Industrial Product Price Index – Communications.
Computer Software	0	3	Statistics Canada Industrial Product Price Index – Electronic Computing and Peripheral Equipment Industries.
Electricity	9	12	Statistics Canada Industrial Product Price Index – Electric Power Selling Price Index (Non-Residential) over 5,000 KW – Ontario.
Gas	7	3	Statistics Canada Industrial Product Price Index – Piped Gas.
Oil	1	0	Statistics Canada Industrial Product Price Index – Heavy Fuel Oil.
Telephone	4	3	Statistics Canada Industrial Product Price Index – Communications.
Water	1	1	Statistics Canada Industrial Product Price Index – Water.
Renovations	3	2	Statistics Canada Industrial Product Price Index – Historical Non-Residential Price Deflators.
Transportation	3	4	Statistics Canada Industrial Product Price Index – Transportation.
Shelter	1	1	Statistics Canada Industrial Product Price Index – Shelter.
Food Away From Home	1	1	Statistics Canada Industrial Product Price Index – Food Purchased From Restaurants.
Insurance	1	1	Statistics Canada Industrial Product Price Index – Homeowner's Insurance Premiums.
Space Rental	1	1	Statistics Canada Industrial Product Price Index – Shelter.

TABLE A-1 *Consumer Price Index and the Ontario University Non-Salary Price Index*

(1980–81 = 100)

Year	OUNSPI	CPI	OUNSPI Annual % Increase	CPI Annual % Increase
Actual				
1970-71	37.8	44.7	-	-
1971-72	39.5	46.4	4.4	3.9
1972-73	40.8	48.8	3.4	5.1
1973-74	45.4	53.1	11.2	8.9
1974-75	52.9	59.2	16.6	11.4
1975-76	58.6	65.1	10.9	10.0
1976-77	63.9	69.5	8.9	6.8
1977-78	71.8	75.5	12.3	8.6
1978-79	78.8	82.4	9.9	9.1
1979-80	89.1	90.0	13.1	9.2
1980-81	100.0	100.0	12.2	11.2
1981-82	113.9	112.2	13.9	12.2
1982-83	125.5	122.7	10.2	9.4
1983-84	131.2	129.0	4.5	5.1
1984-85	139.0	134.0	6.0	3.9
1985-86	145.2	139.5	4.4	4.1
1986-87	149.2	145.4	2.8	4.2
1987-88	154.4	151.6	3.5	4.3
1988-89	158.8	158.0	2.8	4.2
1989-90	162.1	166.4	2.1	5.3
1990-91	164.7	174.9	1.6	5.1
1991-92	166.7	181.9	1.2	4.0
1992-93(e)	169.3	184.8	1.6	1.6
1993-94(e)	172.2	188.0	1.7	1.7

e = estimate

TABLE A-2 *Annual Percentage Variation in the Ontario University Non-Salary Price Index Components*

Component	1971 -72	1972 -73	1973 -74	1974 -75	1975 -76	1976 -77	1977 -78	1978 -79	1979 -80	1980 -81	1981 -82	1982 -83	1983 -84	1984 -85	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90	1990 -91	1991 -92
Books	9.9	-3.7	-5.3	13.0	19.5	4.1	19.2	9.5	25.2	3.5	10.7	17.1	3.2	2.5	9.2	2.1	6.5	-0.2	1.7	2.0	2.9
Periodicals	8.3	11.3	23.7	6.9	17.1	9.5	17.8	22.3	11.0	14.5	16.1	17.6	12.5	16.7	13.0	7.9	4.6	1.3	7.0	7.6	11.2
Equipment	1.4	0.4	5.2	19.2	13.1	4.6	16.5	15.0	11.1	12.5	15.3	7.3	2.9	9.1	5.8	0.6	-3.2	-4.4	1.2	0.8	0.8
Computer Equipment	1.9	1.4	1.2	3.4	7.9	0.5	9.1	6.2	5.9	19.8	14.9	3.4	-0.2	2.6	2.2	1.9	0.0	2.7	2.2	-3.4	-1.7
Furniture	5.0	4.7	11.0	14.8	8.5	6.1	4.9	7.0	12.8	10.4	12.3	7.1	4.5	6.7	6.0	4.7	3.1	4.1	3.5	3.2	1.2
Stationery and Paper	1.1	2.0	20.3	33.8	9.0	3.6	5.0	9.9	17.3	14.1	9.0	-0.6	0.9	10.7	-0.5	6.9	9.9	7.5	1.4	-3.4	-11.3
Printing Materials	1.7	4.5	22.7	23.5	2.2	-0.7	4.2	7.2	14.2	10.0	10.3	2.6	2.7	6.7	0.1	6.0	5.2	10.7	-0.3	-1.6	-8.0
Tools and Apparatus	3.2	2.3	6.8	16.0	10.9	6.5	11.6	10.6	16.7	14.3	11.6	8.3	4.3	5.9	5.1	3.5	3.7	6.0	3.7	2.7	2.3
Chemicals	1.1	1.8	11.0	30.5	10.0	4.2	6.0	8.7	16.7	15.0	12.7	5.0	3.3	2.7	2.1	0.1	6.1	8.7	-2.5	1.3	-2.1
Postage	12.3	7.6	0.0	0.0	0.4	19.3	25.3	17.0	19.6	0.2	24.2	40.9	5.1	0.0	10.7	2.5	7.7	3.7	2.0	4.6	7.7
Long Distance	2.6	4.5	1.9	1.0	3.7	7.4	9.3	5.6	3.5	4.5	11.5	15.1	5.4	1.4	1.1	-0.6	-0.2	-2.7	-1.4	-0.5	1.7
Computer Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-3.4	-1.7
Electricity	4.9	6.9	8.0	8.2	9.4	28.3	28.3	5.3	10.4	11.7	9.8	9.7	8.3	8.1	6.5	4.6	5.5	5.4	5.8	7.8	9.6
Gas	1.5	0.4	4.9	12.4	25.8	22.1	15.6	14.6	5.5	17.9	26.5	22.0	5.0	1.4	0.0	-0.6	-1.9	-2.5	-5.7	-1.0	9.1
Oil	11.7	-3.3	54.4	52.1	10.1	18.5	20.8	14.8	26.8	22.4	24.6	7.4	13.7	11.9	-5.2	-37.6	12.7	-15.2	13.2	5.0	-16.3
Telephone	2.6	4.5	1.9	1.0	3.7	7.4	9.3	5.6	3.5	4.5	11.5	15.1	5.4	1.4	1.1	-0.6	-0.2	-2.7	-1.4	-0.5	1.7
Water	-	-	-	7.7	8.5	12.3	11.7	7.6	7.3	8.3	12.4	11.7	6.7	6.5	6.5	3.1	2.2	7.2	8.1	9.1	7.9
Renovations	4.4	5.2	11.9	19.0	5.5	5.6	6.8	11.1	15.1	9.4	9.7	4.8	4.6	3.3	4.4	5.0	4.8	5.5	3.1	3.3	-1.5
Transportation	3.9	1.8	5.0	11.0	12.2	9.2	6.0	6.6	11.4	14.4	18.1	10.7	4.7	3.9	5.0	2.0	4.4	1.9	6.3	4.8	0.6
Shelter	5.3	6.0	6.5	7.7	9.7	10.9	8.5	6.7	5.5	7.6	12.5	11.0	5.7	3.8	3.5	3.3	4.7	4.9	6.0	5.4	3.4
Food Away From Home	4.5	7.6	15.7	18.4	11.9	7.4	5.3	8.7	12.1	8.5	9.9	9.6	4.5	4.0	4.3	4.9	3.6	5.2	5.1	7.3	7.5
Insurance	28.5	20.9	22.4	13.2	26.0	21.2	12.2	5.9	5.8	8.9	20.0	8.4	5.6	2.8	5.4	10.5	13.0	8.7	6.8	-1.9	0.1
Space Rental	5.3	6.0	6.5	7.7	9.7	10.9	8.5	6.7	5.5	7.6	12.5	11.0	5.7	3.8	3.5	3.3	4.7	4.9	6.0	5.4	3.4

e = estimated figure

TABLE A-3 *Component Price Indices in the Ontario University Non-Salary Price Index*

(Based on the Fiscal Year 1980–81 = 100.0)

Component	1970 -71	1971 -72	1972 -73	1973 -74	1974 -75	1975 -76	1976 -77	1977 -78	1978 -79	1979 -80	1980 -81	1981 -82	1982 -83	1983 -84	1984 -85	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90	1990 -91	1991 -92
Books	42.0	46.1	44.4	42.0	47.5	56.8	59.1	70.5	77.2	96.6	100.0	110.7	129.6	133.8	137.2	149.8	153.0	162.9	162.5	165.3	168.5	176.0
Periodicals	26.7	29.0	32.2	39.8	42.6	49.9	54.6	64.3	78.7	87.4	100.0	116.1	136.5	153.6	179.3	202.7	218.6	228.6	231.6	247.8	266.7	296.5
Equipment	39.6	40.1	40.3	42.4	50.5	57.1	59.7	69.6	80.0	88.9	100.0	115.3	123.6	127.2	138.8	146.9	147.8	143.0	136.7	138.3	139.5	140.6
Computer Equipment	58.0	59.1	60.0	60.7	62.7	67.7	68.0	74.2	78.8	83.5	100.0	114.9	118.7	118.5	121.6	124.2	126.6	126.7	130.1	132.9	128.5	126.3
Furniture	44.4	46.6	48.8	54.1	62.1	67.4	71.5	75.0	80.3	90.5	100.0	112.3	120.3	125.7	134.1	142.1	148.8	153.4	159.8	165.3	170.7	172.6
Stationery and Paper	34.5	34.9	35.6	42.8	57.3	62.4	64.7	68.0	74.7	87.6	100.0	109.0	108.4	109.3	121.0	120.4	128.7	141.5	152.0	154.2	149.0	132.1
Printing Materials	43.6	44.4	46.4	56.9	70.3	71.8	71.3	74.2	79.6	90.9	100.0	110.3	113.2	116.2	124.0	124.2	131.6	138.5	153.3	152.9	150.5	138.5
Tools and Apparatus	39.3	40.6	41.5	44.3	51.4	57.1	60.7	67.8	74.9	87.5	100.0	111.6	120.9	126.1	133.5	140.2	145.1	150.5	159.5	165.3	169.8	173.7
Chemicals	37.9	38.3	39.0	43.3	56.4	62.1	64.7	68.6	74.5	86.9	100.0	112.7	118.3	122.2	125.6	128.2	128.3	136.1	148.0	144.3	146.2	143.1
Postage	39.3	44.2	47.5	47.5	47.5	47.7	56.9	71.3	83.4	99.8	100.0	124.2	175.0	183.9	183.9	203.7	208.8	224.9	233.3	238.1	249.1	268.4
Long Distance	65.2	66.9	69.9	71.2	72.0	74.6	80.2	87.6	92.5	95.7	100.0	111.5	128.4	135.3	137.1	138.6	137.7	137.5	133.7	131.8	131.2	133.4
Computer Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	128.5	126.3
Electricity	32.7	34.3	36.6	39.6	42.8	46.8	60.0	77.0	81.1	89.5	100.0	109.8	120.5	130.5	141.1	150.2	157.2	165.9	174.9	185.0	199.4	218.5
Gas	32.9	33.4	33.5	35.1	39.5	49.7	60.7	70.2	80.4	84.8	100.0	126.5	154.3	162.0	164.3	164.3	163.3	160.2	156.2	147.3	145.9	159.1
Oil	14.0	15.7	15.2	23.4	35.6	39.2	46.5	56.2	64.5	81.7	100.0	124.6	133.8	152.2	170.3	161.5	100.7	113.5	96.3	108.9	114.4	95.8
Telephone	65.2	66.9	69.9	71.2	72.0	74.6	80.2	87.6	92.5	95.7	100.0	111.5	128.4	135.3	137.1	138.6	137.7	137.5	133.7	131.8	131.2	133.4
Water	54.5	54.5	54.5	54.5	58.7	63.7	71.6	80.0	86.0	92.3	100.0	112.4	125.5	134.0	142.8	152.1	156.8	160.2	171.8	185.6	202.4	218.4
Renovations	41.1	42.9	45.1	50.5	60.0	63.4	66.9	71.5	79.4	91.4	100.0	109.7	115.0	120.2	124.2	129.6	136.1	142.7	150.5	155.2	160.3	158.0
Transportation	46.0	47.7	48.6	51.1	56.7	63.6	69.5	73.7	78.5	87.4	100.0	118.1	130.7	136.7	142.1	149.2	152.1	158.7	161.7	171.8	180.0	181.0
Shelter	48.9	51.4	54.5	58.1	62.6	68.6	76.1	82.6	88.1	93.0	100.0	112.5	124.8	131.9	136.9	141.7	146.3	153.2	160.7	170.4	179.5	185.7
Food Away From Home	38.8	40.5	43.6	50.4	59.7	66.8	71.8	75.6	82.2	92.1	100.0	109.9	120.4	125.8	130.9	136.5	143.2	148.4	156.1	164.0	176.0	189.1
Insurance	22.2	28.6	34.5	42.3	47.8	60.3	73.0	82.0	86.8	91.9	100.0	120.0	130.1	137.3	141.2	148.8	164.5	185.8	201.9	215.7	211.6	211.9
Space Rental	48.9	51.4	54.5	58.1	62.6	68.6	76.1	82.6	88.1	93.0	100.0	112.5	124.8	131.9	136.9	141.7	146.3	153.2	160.7	170.4	179.5	185.7

e = estimated figure

Notes